Connecting via Winsock to STN

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Welcome to STN International! Enter x:x
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FILE 'HOME' ENTERED AT 15:12:50 ON 20 JUL 2009

=> file reg

=>

Uploading C:\Program Files\Stnexp\Queries\10552023.str

chain nodes: 1 12 14 15 16 17 18 19 20 21 22 ring nodes: 1 2 3 4 5 6 7 8 9 10 chain bonds:

1-17 4-13 5-22 6-18 7-11 8-12 9-20 10-21 13-14 13-16 14-15 15-19 ring bonds :

1-2 1-6 2-3 2-7 3-4 3-10 4-5 5-6 7-8 8-9 9-10 exact/norm bonds:

1-17 2-7 3-10 7-8 8-9 8-12 9-10 13-16 14-15 exact bonds: 4-13 5-22 6-18 7-11 9-20 10-21 13-14 15-19

normalized bonds : 1-2 1-6 2-3 3-4 4-5 5-6

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS 19:Atom 20:CLASS 21:CLASS 16:CLASS 16:CL

STRUCTURE UPLOADED

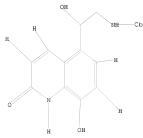
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=> d 112
L12 NOT FOUND
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The L-number entered has not been defined in this session, or it has been deleted. To see the L-numbers currently defined in this session, enter DISPLAY HISTORY at an arrow prompt (=>).

=> d 11

L1 HAS NO ANSWERS

STR



Structure attributes must be viewed using STN Express query preparation.

=> s 11 sam

SAMPLE SEARCH INITIATED 15:13:27 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED -593 TO ITERATE

100.0% PROCESSED SEARCH TIME: 00.00.01 593 ITERATIONS

6 ANSWERS

FULL FILE PROJECTIONS: ONLINE **COMPLETE** PROJECTED ITERATIONS:

PROJECTED ANSWERS:

BATCH **COMPLETE** 10399 TO 13321 6 TO 266

6 SEA SSS SAM L1

=> d scan

6 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN

2(1H)-Quinolinone, 5-[(1R)-2-[[2,3-dihydro-2-[(4-methoxyphenyl)methyl]-1Hinden-2-y1]amino]-1-hydroxyethy1]-8-hydroxy-

C28 H28 N2 O4

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):end

=> s 11 full

FULL SEARCH INITIATED 15:13:34 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 11613 TO ITERATE

100.0% PROCESSED 11613 ITERATIONS SEARCH TIME: 00.00.02

187 ANSWERS

L3 187 SEA SSS FUL L1

=> file ca

=> s 13

L4 85 L3 => s 14 and py>2003

5673999 PY>2003 L5 78 L4 AND PY>2003

=> file reg

=>

Uploading C:\Program Files\Stnexp\Queries\552023.str

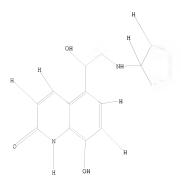
chain nodes :

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11 12 13 14 15 16 17 18 20 21 22 27 28
ring nodes :
1 2 3 4 5 6 7 8 9 10 19 23 24 25 26
chain bonds :
1-17 4-13 5-22 6-18 7-11 8-12 9-20 10-21 13-14 13-16 14-15 15-19 19-27
23-28
ring bonds :
1-2 1-6 2-3 2-7 3-4 3-10 4-5 5-6 7-8 8-9 9-10 19-23 19-26 23-24 24-25
25-26
exact/norm bonds :
1-17 2-7 3-10 7-8 8-9 8-12 9-10 13-16 14-15 15-19 19-23 19-26 23-24
24-25 25-26
exact bonds :
4-13 5-22 6-18 7-11 9-20 10-21 13-14 19-27 23-28
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6
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Match level: 1:1Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS 19:Atom 20:CLASS 21:CLASS 22:CLASS 23:Atom 24:Atom 25:Atom 26:Atom 27:CLASS 28:CLASS 28:C

L6 STRUCTURE UPLOADED

=> d 16 L6 HAS NO ANSWERS L6 STR



Structure attributes must be viewed using STN Express query preparation.

=> s 16 full

FULL SEARCH INITIATED 15:15:50 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 1111 TO ITERATE

100.0% PROCESSED 1111 ITERATIONS SEARCH TIME: 00.00.01

130 SEA SSS FUL L6

=> file ca

=> s 17 L8 76 L7

=> d ibib abs fhitstr 1-76

L8 ANSWER 1 OF 76 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 151:69382 CA

TITLE: Benefit-risk assessment of long-acting β-adrenergic and ultra long-acting

β-adrenergic agonists

AUTHOR(S): Cazzola, Mario; Loetvall, Jan Olof; Matera, Maria

Gabriella

CORPORATE SOURCE: Respiratory Medicine, Department of Internal Medicine,

Unit of Respiratory Diseases, University of Rome Tor

130 ANSWERS

Vergata, Rome, Italy

SOURCE: Asthma: Current Treatments (2007), 17-29. Editor(s):

Polosa, Riccardo; Holgate, Stephen T. Clinical

Publishing: Oxford, UK.

CODEN: 69LHXY: ISBN: 978-1-84692-015-8

DOCUMENT TYPE: Conference; General Review

LANGUAGE: English

AB A review on enantiomers of long-acting β -agonists, ultra long-acting

 β -agonists under development, and other long-acting β -agonists.

312753-06-3, Indacaterol

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL

(Biological study); USES (Uses)

(inhaled corticosteroid in combination with long-acting

β-adrenergic agonist or ultra-long-acting β-adrenergic

agonist could be useful in patient with asthma and chronic obstructive pulmonary disease)

312753-06-3 CA RN

2(1H)-Quinolinone, 5-[(1R)-2-[(5,6-diethyl-2,3-dihydro-1H-inden-2-CN

yl)amino]-1-hydroxyethyl]-8-hydroxy- (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT: 9.3 THERE ARE 93 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 2 OF 76 COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 151:63853 CA

TITLE: Process for producing drug particles smaller than ten

microns in size INVENTOR(S):

Muhrer, Gerhard; Kieckbusch, Thomas; Singh, Dilraj; Thakur, Ranjit; Schaffluetzel, Kurt; Rasenack, Norbert

PATENT ASSIGNEE(S): Novartis A.-G., Switz.

SOURCE: PCT Int. Appl., 21pp.

CODEN: PIXXD2 DOCUMENT TYPE: Pat.ent.

LANGUAGE: English FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

P	A1	ENT	NO.			KIN	D	DATE			APPL	ICAT	I NOI	NO.		D	ATE	
-							-									-		
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			CA,	CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,	ES,

FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: EP 2007-123165 A 20071213 AB A process of preparing a particulate and substantially crystalline drug substance.

The process involves suspending a substantially crystalline drug substance in an anti-solvent to give a suspension, homogenizing the suspension at elevated pressure to give drug particles that have a mean particle size of less than about 10 µm, and drying the drug particles to remove any residual anti-solvent.

312753-06-3D, Indacaterol, salts

RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(process for producing drug particles smaller than ten microns in size) 312753-06-3 CA

2(1H)-Quinolinone, 5-[(1R)-2-[(5,6-diethyl-2,3-dihydro-1H-inden-2vl)amino]-1-hydroxyethyl]-8-hydroxy- (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 3 OF 76 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 150:555861 CA

TITLE: Use of CRTH2 antagonist compounds

INVENTOR(S): Hunter, Michael George; Pettipher, Eric Roy; Perkins, Colin Michael; Payton, Mark Anthony; Xue, Luzheng

THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

PATENT ASSIGNEE(S): Oxagen Limited, UK

PCT Int. Appl., 51pp. SOURCE: CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

REFERENCE COUNT:

PATENT INFORMATION:

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		FI,	GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,
		KG,	KM,	KN,	KP,	KR,	KZ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,
		ME.	MG,	MK,	MN,	MW.	MX,	MY,	MZ,	NA.	NG,	NI,	NO.	NZ,	OM,	PG,	PH,
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	RW:	AT.	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI.	FR.	GB,	GR,	HR,	HU,
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		TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,
		TG.	BW.	GH,	GM,	KE.	LS,	MW.	MZ,	NA.	SD,	SL,	SZ.	TZ,	UG,	ZM,	ZW.
		AM.	AZ.	BY,	KG.	KZ.	MD,	RU,	TJ,	TM							
PRIORITY	APP	LN.	INFO	. : `						GB 2	007-	2221	6		A 2	0071	113
OTHER SC	URCE	(S):			MAR	PAT	150:	5558	61								

OTHE AB

The invention relates to CRTH2 antagonist compds, useful for desensitizing the immune system of a subject to allergens, thus preventing or reducing the symptoms of allergic conditions such as allergic asthma, allergic rhinitis or atopic dermatitis.

312753-06-3, Indacaterol

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (use of CRTH2 antagonists)

312753-06-3 CA RN CN

2(1H)-Quinolinone, 5-[(1R)-2-[(5,6-diethyl-2,3-dihydro-1H-inden-2yl)amino]-1-hydroxyethyl]-8-hydroxy- (CA INDEX NAME)

Absolute stereochemistry.

L8 ANSWER 4 OF 76 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 150:555858 CA

Use of CRTH2 antagonist compounds TITLE:

Hunter, Michael George; Pettipher, Eric Roy; Perkins, INVENTOR(S): Colin Michael; Payton, Mark Anthony; Xue, Luzheng

PATENT ASSIGNEE(S): Oxagen Limited, UK SOURCE: PCT Int. Appl., 51pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PATENT				KIN		DATE			APPL						ATE	
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		KG,	KM,	KN,	KΡ,	KR,	KZ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,
							MX,										
							SC,									SY,	TJ,
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	RW:						CZ,										
							LV,										
							CI,										
							LS,				SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,
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	RL: PAG								THU	(Th	erap	euti	c us	e);	RIOF		

(Biological study); USES (Uses)

(use of CRTH2 antagonists)

312753-06-3 CA RN CN

2(1H)-Quinolinone, 5-[(1R)-2-[(5,6-diethyl-2,3-dihydro-1H-inden-2yl)amino]-1-hydroxyethyl]-8-hydroxy- (CA INDEX NAME)

Absolute stereochemistry.

L8 ANSWER 5 OF 76 CA COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 150:539583 CA TITLE: Preparation of 5-[(3,3,3-trifluoro-2-hydroxy-1-arylpropy1)amino]-1H- quinolin-2-ones as antiinflammatories.

INVENTOR(S): Berger, Markus; Rehwinkel, Hartmut; Zollner, Thomas;

May, Ekkehard; Hassfeld, Jorma; Schaecke, Heike
PATENT ASSIGNEE(S): Bayer Schering Pharma Aktiengesellschaft, Germany;

Astrazeneca AB

SOURCE: PCT Int. Appl., 70pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent

LANGUAGE: Facent

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO	э.		KIN	D	DATE			APPL	ICAT	I NOI	NO.		D	ATE	
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WO 200906	65503		A1		2009	0528		WO 2	008-	EP94	40		2	0081	108
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EP 206288	80		A1		2009	0527		EP 2	007-	7601	9		2	0071	122
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	AL, BA,														
PRIORITY APPLI	N. INFO	. :						EP 2	007-	7601	9	2	A 2	0071	122
OTHER SOURCE (S):		CASI	REAC	T 15	0:539	9583								

AB Title compds. [I; R1, R2 = H, OH, halo, cyano, NO2, perfluoroalkyl, (substituted) alkyl, alkoxy, alkylthio; R1R2 = O(CH2)pO, OCH:CH, NHN:CH, etc.; p = 1, 2; R3 = H, OH, halo, cyano, perfluoroalkyl, (substituted) alkyl, alkoxy, alkylthio; R4 = H, halo, OH, perfluoroalkyl, alkyl, alkoxy,

GI

alkylthio, cyano, NO2, amino, etc.; R5 = (halo)alkyl, alkenyl, alkynyl, cycloalkylalkyl, cycloalkylalkyl, heterocyclylalkyl, heterocyclylalkenyl, alkylthio, alkylsulfonyl, cyano, halo, amino, etc.], were prepared Thus, 5-[[l-(2-chloro-3-fluoro-4-methoxyphenyl)-3,3,3-trifluoro-2-hydroxy-2-(methoxymethyl)propyl)amino]-7-fluoro-1H-quinolin-2-one (preparation given) bound to the glucocorticoid receptor with IC50 = 3.1 nM.

IT 312753-06-3

CN

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (coadministration; preparation of trifluorohydroxyarylpropylaminoquinolinones as antiinflammatories)

RN 312753-06-3 CA

2(1H)-Quinolinone, 5-[(1R)-2-[(5,6-diethyl-2,3-dihydro-1H-inden-2-yl)amino]-1-hydroxyethyl]-8-hydroxy- (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 6 OF 76 CA COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 150:539582 CA

TITLE: Preparation of

5-[(3,3,3-trifluoro-2-hydroxy-1-arylpropyl)amino]-1H-

INVENTOR(S): Berger, Markus; Rehwinkel, Hartmut; Schaecke, Heike; May, Ekkehard; Zollner, Thomas; Hassfeld, Jorma

PATENT ASSIGNEE(S): Bayer Schering Pharma Aktiengesellschaft, Germany;
Astrazeneca AB

SOURCE: Eur. Pat. Appl., 34pp.

CODEN: EPXXDW
DOCUMENT TYPE: Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

EP 2062880 A1 20090527 EP 2007-76019 20071122

R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, RS

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WO 2009065503
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             FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE,
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     US 20090137564
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PRIORITY APPLN. INFO.:
                                            EP 2007-76019
                                                                A 20071122
                                                                P 20071126
                                            US 2007-990116P
GI
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AB Title compds. [I; R1, R2 = H, OH, halo, cyano, NO2, perfluoroalkyl, (substituted) alkyl, alkoxy, alkylthio; R1R2 = O(CR2)pO, OCH:CR, NHN:CH, etc.; p = 1, 2; R3 = H, OH, halo, cyano, perfluoroalkyl, (substituted) alkyl, alkoxy, alkylthio; R4 = H, halo, OH, perfluoroalkyl, alkyl, alkoxy, alkylthio; R4 = H, halo, OH, perfluoroalkyl, alkyl, alkoxy, alkylthio, cyano, NO2, amino, etc.; R5 = (halo)alkyl, alkenyl, alkynyl, cycloalkylalkyl, cycloalkylalkyl, cycloalkylalkyl, cycloalkylalkyl, cyano, halo, amino, etc.], were prepared Thus, 5-[[1-(2-chloro-3-fluoro-4-methoxyphenyl)-3,3,3-trifluoro-2-hydroxy-2-(methoxymethyl)propyl]aminol-7-fluoro-1H-quinolin-2-one (preparation given) bound to the glucocorticoid receptor with IC50 = 3.1 nM.

IT 312753-06-3, Indacaterol

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (coadministration; preparation of

trifluorohydroxyarylpropylaminoquinolinones as antiinflammatories) RN 312753-06-3 CA

CN 2(1H)-Quinolinone, 5-[(1R)-2-[(5,6-diethyl-2,3-dihydro-1H-inden-2-yl)amino]-1-hydroxyethyl]-8-hydroxy- (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 7 OF 76 CA COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 150:480748 CA

10

TITLE: Organic compounds for treatment of an inflammatory or obstructive airways disease

INVENTOR(S): Fairhurst, Robin Alec

PATENT ASSIGNEE(S): Novartis AG, Switz. SOURCE: PCT Int. Appl., 50pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

_	PATENT				KIN	_	DATE			APPL					-	ATE	
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										NL,							
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	compone															and	d
	cortico																
	antimus															mine	. (vi
	caspa																
	(ix) an	LTD	4 an	tago	nist	, (x) a :	seri	ne p	rote	ase .	inhi	bito:	r, (xi)	a PD	E4

inhibitor and (xii) a dual-acting beta-2 adrenoceptor agonist / muscarinic antagonist, for simultaneous, sequential or sep. administration in the

treatment of an inflammatory or obstructive airways disease.

312753-06-3, Indacaterol

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (organic compds. for treatment of inflammatory or obstructive airways disease)

312753-06-3 CA

2(1H)-Ouinolinone, 5-[(1R)-2-[(5,6-diethvl-2,3-dihvdro-1H-inden-2-CN vl)aminol-1-hvdroxvethvll-8-hvdroxv- (CA INDEX NAME)

Absolute stereochemistry.

L8 ANSWER 8 OF 76 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 150:413828 CA

TITLE: Efficacy and Safety of Indacaterol, a New 24-hour β 2-Agonist, in Patients with Asthma: A

Dose-Ranging Study

Kanniess, Frank; Boulet, Louis-Philippe; Pierzchala, AUTHOR(S):

Wladyslaw; Cameron, Ray; Owen, Roger; Higgins, Mark CORPORATE SOURCE: Pulmonary Research Institute, Hospital Grosshansdorf, Grosshansdorf, Germany

SOURCE: Journal of Asthma (2008), 45(10), 887-892

CODEN: JOUADU; ISSN: 0277-0903

PUBLISHER: Informa Healthcare

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Background: Indacaterol is a new once-daily inhaled \$2-agonist in clin. development for asthma as a component of a fixed-dose combination with an inhaled corticosteroid. Objectives: To investigate the efficacy and safety of indacaterol in patients with chronic persistent asthma. Methods: A total of 115 patients were randomized in a double-blind, incomplete-block cross-over design to sequences of four 7-day treatment periods (separated by 7-day washouts) with indacaterol 100, 200, 300, 400, or 600 μ g or placebo, once daily, via single-dose dry-powder inhaler. After the fourth washout, patients received 1 day of open-label formoterol 12 µ q twice daily. Forced expiratory volume in 1 s (FEV1) was measured for 24 h post-dose on days 1 and 7. Results: For standardized (with respect to time) FEV1 area under the curve at 22 to 24 h (AUC22-24h) on day 1, indacaterol doses ≥200 μ g were superior to placebo (p < 0.05) and similar or greater than formoterol 12 µg twice daily. By day 7, mean differences from placebo in FEV1 standardized AUC22-24h were 0.08, 0.16, 0.15, 0.11, and 0.16 L for indacaterol 100, 200, 300, 400, and 600

 $\mu g,$ resp. (all p < 0.05 vs. placebo). Mean FEVI for indacaterol doses $\geq 200~\mu g$ on day 7 was higher than placebo (p < 0.05) pre-dose and at all post-dose time points. ABs were generally mild in severity; no serious ABs occurred. No clin. meaningful differences were observed between treatments in any safety assessments. Conclusions: Once-daily indacaterol demonstrated sustained 24-h bronchodilator efficacy, with similar efficacy on days 1 and 7, and was generally well tolerated.

IT 312753-06-3, Indacaterol

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(once daily $2^{\frac{1}{4}}$ -h B^2 -agonist indacaterol was well tolerated and showed sustained bronchodilator efficacy in treatment of patient with mild, moderate or severe persistent asthma)

RN 312753-06-3 CA

CN 2(1H)-Quinolinone, 5-[(1R)-2-[(5,6-diethyl-2,3-dihydro-1H-inden-2-yl)amino]-1-hydroxyethyl]-8-hydroxy- (CA INDEX NAME)

Absolute stereochemistry.

12

English

REFERENCE COUNT:

THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 9 OF 76 ACCESSION NUMBER:

TITLE: INVENTOR(S):

PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE: LANGUAGE:

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMA
ANSWER 9 OF 76 CA COPYRIGHT 2009 ACS on STN

150:406769 CA
Metered dose dispenser for inhalant formulations
Child, Andrew D.; Helm, Stephen D.
3M Innovative Properties Company, USA
PCT Int. Appl., 29pp.
CODEN: PIXXD2
Patent

PA'	TENT	NO.			KIN	D	DATE			APPL	ICAT	ION I	NO.		D	ATE	
WO	2009	0460	74		A1		2009	0409		WO 2	008-	US78	406		2	0081	001
	W:	AE,	AG,	AL,	AM,	AO,	AT,	AU,	AZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,
		CA,	CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,	ES,
		FI,	GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,
		KG,	KM,	KN,	KΡ,	KR,	ΚZ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,
		ME,	MG,	MK,	MN,	MW,	MX,	MΥ,	ΜZ,	NA,	NG,	ΝI,	NO,	ΝZ,	OM,	PG,	PH,

PI., PT., RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, MM, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLM. INFO.:

GB 2007-19257 A 20071004

AB The invention relates to a metered dose inhaler containing a formulation of medicament, for example, a drug for treatment of respiratory disorder, HFA 134a and/or HFA27, and being substantially free of ethanol and surfactant, with a metering valve comprising a helical spring, a seal, a seal support and a sliding valve stem, wherein the valve is configured and arranged such that a region of compressive contact is defined where a surface applying force to the seal is substantially flat and extends in an arc through an angle in the range from about 180 to 360°. Thus, an aerosol canister was cold-filled with a suspension containing 1.97 mg/mL micronized albuterol sulfate in HFA 134a, and the a metering valve was crimped in place. The inhaler showed a significant and effective reduction in

the decrease of return force over the lifetime of the inhaler. IT 312753-06-3, Indacaterol

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(metered dose inhaler with metering valve and inhalant composition free of
ethanol and surfactant)

RN 312753-06-3 CA

CN 2(1H)-Quinolinone, 5-[(1R)-2-[(5,6-diethyl-2,3-dihydro-1H-inden-2vl)amino]-1-hydroxyethyl]-8-hydroxy- (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 10 OF 76 CA COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 150:297293 CA

TITLE: AUTHOR(S):

CORPORATE SOURCE:

SOURCE:

New approaches to managing asthma: a US perspective Berger, William E. Allergy and Asthma Associates of Southern California,

Mission Viejo, CA, USA Therapeutics and Clinical Risk Management (2008), 4(2), 363-379

CODEN: TCRMA6; ISSN: 1176-6336

PUBLISHER: Dove Medical Press (NZ) Ltd.
DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

AB A review. Despite remarkable advances in diagnosis and long-term management, asthma remains a serious public health concern. Newly updated expert guidelines emphasize the intra- and inter-individual variability of asthma and highlight the importance of periodic assessment of asthma control. These guidelines update recommendations for step-wise asthma treatment, address the burgeoning field of asthma diagnostics, and stress the importance of a patient and health care professional partnership, including written action plans and self monitoring. The field of asthma therapeutics is expanding rapidly, with promising new treatment options available or in development that may address some of the existing barriers to successful asthma management. These approaches simplify treatment, use combinations of agents in one delivery device that have complementary actions, or target specific pathways involved in asthma pathophysiol. Considerable activity is taking place in asthma pharmacogenetics. This review provides an overview of these new approaches to managing asthma, including their present status and future potential.

IT 312753-06-3, Indacaterol

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(Asmanex in combination with indacaterol may be effective in treatment of patient with asthma)

RN 312753-06-3 CA

2(1H)-Quinolinone, 5-[(1R)-2-[(5,6-diethyl-2,3-dihydro-1H-inden-2yl)aminol-1-hydroxyethyl]-8-hydroxy- (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT: 121 THERE ARE 121 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 11 OF 76 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 150:15638 CA

TITLE: A cell-based assay to assess the persistence of action

of agonists acting at recombinant human β2

adrenoceptors

AUTHOR(S): Summerhill, Suean, Stroud, Timothy, Nagendra, Roshini;
Perros-Huguet, Christelle; Trevethick, Michael
CORPORATE SOURCE: Pfizer Global Research and Development, Allerdy and

Respiratory Biology, Sandwich, Kent, CT13 9NJ, UK
SOURCE: Journal of Pharmacological and Toxicological Methods

(2008), 58(3), 189-197

(2008), 58(3), 189-197 CODEN: JPTMEZ: ISSN: 1056-8719

PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English

Introduction: The aim was to establish a robust, 96-well, cell-based assay to assess the potency and persistence of action of agonists acting at human recombinant β2 adrenoceptors expressed in CHO (Chinese Hamster Ovary) cells and to compare this with published duration of action data in quinea pig isolated trachea and human bronchus. Methods: Cells were treated with either: (i) B-adrenoceptor agonist for 30 min, washed and cyclicAMP (cAMP) measured 30 min later-termed washed cells or, (ii) treated with solvent for 30 min, washed, and then treated with β-adrenoceptor agonist for 30 min and cAMP measured-termed unwashed' cells. The washed EC50 was divided by the unwashed EC50 to determine a rightward shift concentration ratio, which was indicative of the persistence of action at the receptor. Results: At the 82 adrenoceptor salmeterol, carmoterol and indacaterol were resistant to washing with a concentration ratio of < 5, indicating a long persistence of action, whereas formoterol, isoprenaline and salbutamol were washed out with a ratio of 32. > 294 and > 800 resp., suggesting a shorter persistence of action. At β 1 and β 3 adrenoceptors all compds. washed out. The persistent effects of salmeterol at B2 following washing could be reversed by the selective β2 antagonist ICI 118551, suggesting continued receptor activation. Discussion: The data presented agree well with published data assessing duration of action of $\beta 2$ agonists in human isolated bronchus and quinea pig isolated trachea. Key features are: (a) it is a 96-well format which can be used to assess many compds. in a single experiment, (b) both potency and persistence of agonist action are assessed in the same assay, (c) any effects of concentration on the persistence of action can be

highlighted, and (d) it allows triage of compds. prior to tissue bath studies thus reducing the use of animal tissue.

IT 312753-06-3, Indacaterol

RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(cell-based assay to assess action persistence β2 adrenoceptor agonists)

RN 312753-06-3 CA

CN 2(1H)-Quinolinone, 5-[(1R)-2-[(5,6-diethyl-2,3-dihydro-1H-inden-2-yl)amino]-1-hydroxyethyl]-8-hydroxy- (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 12 OF 76 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 150:106 CA

TITLE: AUTHOR(S):

CORPORATE SOURCE:

SOURCE:

PUBLISHER: DOCUMENT TYPE: LANGUAGE:

Novel long-acting bronchodilators for COPD and asthma Cazzola, M.; Matera, M. G. Unit of Respiratory Diseases, Department of Internal

Medicine, University of Rome 'Tor Vergata', Rome, Italy British Journal of Pharmacology (2008), 155(3),

291-299 CODEN: BJPCBM; ISSN: 0007-1188

Nature Publishing Group Journal; General Review English

A review. An important step in simplifying asthma and chronic obstructive pulmonary disease (COPD) management and improving adherence with prescribed therapy is to reduce the dose frequency to the min. necessary to maintain disease control. Therefore, the incorporation of once-daily dose administration is an important strategy to improve adherence and is a regimen preferred by most patients, which may also lead to enhancement of compliance, and may have advantages leading to improved overall clin. outcomes. Once-daily 82-agonists or ultra long-acting

B2-agonists (LABAs) such as carmoterol, indacaterol, GSK-159797, GSK-597901, GSK-159802, GSK-642444 and GSK-678007 are under development for the treatment of asthma and COPD. Also some new long-acting antimuscarinic agents (LAMAs) such as aclidinium, LAS-35201, GSK656398, GSK233705, NVA-237 (glycopyrrolate) and OrM3 are under development. In any case, the current opinion is that it will be advantageous to develop inhalers containing combinations of several classes of long-acting bronchodilator drugs in an attempt to simplify treatment regimens as much as possible. Consequently, several options for once-daily dual-action ultra LABA+LAMA combination products are currently being evaluated. A different approach is to have a dimer mol. in which both pharmacologies are present (these mols. are known as M3 antagonist- β 2 agonist (MABA) bronchodilators). The advent of a successful MABA product will revolutionize the field and open the door for a new range of combination products.

312753-06-3, Indacaterol

RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU

(Therapeutic use); BIOL (Biological study); USES (Uses) (novel long-acting bronchodilators for COPD and asthma)

RN 312753-06-3 CA

CN 2(1H)-Quinolinone, 5-[(1R)-2-[(5,6-diethyl-2,3-dihydro-1H-inden-2yl)amino]-1-hydroxyethyl]-8-hydroxy- (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

AUTHOR(S):

68 THERE ARE 68 CITED REFERENCES AVAILABLE FOR THIS RECORD, ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 13 OF 76 CA COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 149:569955 CA

TITLE: A method for rapidly predicting drug tissue

distribution using surfactant vesicle electrokinetic

chromatography

Jiang, Zhengjin; Reilly, John; Everatt, Brian CORPORATE SOURCE: Global Discovery Chemistry, Novartis Institutes for

Biomedical Research, Horsham, UK

SOURCE: Electrophoresis (2008), 29(17), 3674-3684

CODEN: ELCTDN; ISSN: 0173-0835

PUBLISHER: Wiley-VCH Verlag GmbH & Co. KGaA

DOCUMENT TYPE: Journal

LANGUAGE: English

Lung tissue distribution of an inhaled drug is important for its potency in the airways and with min. systemic effects within its dose range. As the lung has the smallest diffusion distance of all the organs in the body and negligible diffusion delays, the characteristics of drug distribution in the lung will mainly depend on drug binding to both tissue and plasma protein. This research aims to develop and evaluate surfactant vesicle electrokinetic chromatog. (SEKC) methods for high throughput profile prediction of tissue distribution for inhaled drugs. Several electrokinetic chromatog, methods reported in the literature, as well as immobilized artificial membrane chromatog., were compared and evaluated in respect to chromatog, characteristics and statistical correlations. Among these methods, the docusate sodium salt (AOT) SEKC system showed good reproducibility, short run time, and the highest selectivity for alkylphenone test compds. It also showed a significant statistical correlation between the retention of inhaled drugs and their in vivo volume of distribution at steady-state (Vss) in whole human body neglecting the plasma protein-binding differences. Stronger correlations were observed between the AOT SEKC retention of a series of basic drugs and their rat

lung tissue-to-plasma water partitioning coefficient (Kpu), which is affected only by drug binding to the tissue constituent. Further, on comparing correlations between AOT SEKC retention and Kpu at various rat tissues, it was observed that the strongest correlation was with lung tissue distribution, while the weakest was with brain tissue distribution.

312753-06-3, Indacaterol

RL: ANT (Analyte); PKT (Pharmacokinetics); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(method for rapidly predicting drug tissue distribution using surfactant vesicle electrokinetic chromatog.)

RN 312753-06-3 CA CN

2(1H)-Quinolinone, 5-[(1R)-2-[(5,6-diethyl-2,3-dihydro-1H-inden-2yl)amino]-1-hydroxyethyl]-8-hydroxy- (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT: 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 14 OF 76 CA COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 149:519049 CA

TITLE: Drug combination comprising \$2 agonist and progestin for treatment of muscle loss

INVENTOR(S): Gilbert, Julian Clive; Gristwood, Robert William

PATENT ASSIGNEE(S): Acacia Pharma Limited, UK SOURCE: PCT Int. Appl., 11pp.

CODEN: PIXXD2 DOCUMENT TYPE: Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT	ENT :	NO.			KIN	D	DATE			APPL	ICAT:	ION I	NO.		D	ATE		
						_									-			
WO	2008	1293	8 0		A2		2008	1030		WO 2	008-	GB14.	52		2	080	424	
	W:	ΑE,	AG,	AL,	AM,	AO,	AT,	AU,	AZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,	
		CA,	CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,	ES,	
		FΙ,	GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	
		KG,	KM,	KN,	KP,	KR,	KZ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,	
		ME,	MG,	MK,	MN,	MW,	MX,	MY,	MZ,	NA,	NG,	ΝI,	NO,	NZ,	OM,	PG,	PH,	
		PL.	PT.	RO.	RS.	RU.	SC.	SD.	SE.	SG.	SK.	SL.	SM.	SV.	SY.	TJ.	TM.	

TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM GB 2007-7930 PRIORITY APPLN. INFO.: A 20070424 A 20070424 GB 2007-7931 A 20070525 GB 2007-10101

The present invention is a product comprising a $\beta 2$ agonist and a progestin, as a combined preparation for sep., simultaneous or sequential use in the treatment or prevention of muscle loss. The present invention is also a $\beta 2$ agonist selected from R,R-formoterol, indacaterol or ritodrine, for use in the treatment or prevention of muscle loss.

312753-06-3, Indacaterol ΙT

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (drug combination comprising B2 agonist and progestin for treatment of muscle loss)

312753-06-3 CA RN

CN 2(1H)-Ouinolinone, 5-[(1R)-2-[(5,6-diethvl-2,3-dihvdro-1H-inden-2vl)aminol-1-hvdroxvethvll-8-hvdroxv- (CA INDEX NAME)

Absolute stereochemistry.

L8 ANSWER 15 OF 76 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 149:439380 CA

TITLE: Selective structure-based virtual screening for full and partial agonists of the B2 adrenergic

receptor. [Erratum to document cited in CA149:298766]

de Graaf, Chris; Rognan, Didier AUTHOR(S):

Bioinformatics of the Drug, Institut Gilbert Laustriat CNRS UMR 7175-LC1, Universite Louis Pasteur

Strasbourg, Illkirch, 67401, Fr.

Journal of Medicinal Chemistry (2008), 51(20), 6620

CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

CORPORATE SOURCE:

AB On page 4979, Figure 2 was incorrectly given; the correct figure is given. ТТ

312753-06-3, Indacaterol

RL: BSU (Biological study, unclassified); PAC (Pharmacological activity);

PRP (Properties); BIOL (Biological study) (selective structure-based virtual scr

(selective structure-based virtual screening for full and partial agonists of $\beta 2$ adrenergic receptor (Erratum))

RN 312753-06-3 CA

CN 2(1H)-Quinolinone, 5-[(1R)-2-[(5,6-diethyl-2,3-dihydro-1H-inden-2-yl)amino]-1-hydroxyethyl]-8-hydroxy- (CA INDEX NAME)

Absolute stereochemistry.

L8 ANSWER 16 OF 76 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 149:315569 CA

TITLE: Therapeutic release agents, esters of alkylcarbamic acids, as inhibitors of fatty acid amide hydrolase

activity

INVENTOR(S): Dasse, Olivier; Parrott, Jeff A.; Putman, David; Adam,

Julia

PATENT ASSIGNEE(S): N.V. Organon, Neth. SOURCE: PCT Int. Appl., 250pp.

DOCUMENT TYPE: Patent Appl., 250pp

LANGUAGE: English FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	ENT I				KIN	D	DATE			APPL	ICAT	ION I			D	ATE	
	2008				A2	_	2008	0821		WO 2	008-				2	0080	213
WO	2008	1009	77		A3		2008	1218									
	CA, CH, CI FI, GB, GI KG, KM, KI				AM,	AO,	AT,	AU,	AZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,
	FI, GB, GE KG, KM, KN ME, MG, MK				CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,	ES,
	CA, CH, CN FI, GB, GD KG, KM, KN ME, MG, MK				GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,
	FI, GB, GD, KG, KM, KN, ME, MG, MK,				KP,	KR,	KZ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,
	FI, GB, GD, KG, KM, KN,				MN,	MW,	MX,	MY,	ΜZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,
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		TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	zw			
	RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	HR,	HU,
		ΙE,	IS,	ΙT,	LT,	LU,	LV,	MC,	MT,	NL,	NO,	PL,	PT,	RO,	SE,	SI,	SK,
		TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,
		TG,	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,
		AM,	ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	ΤJ,	TM,	ΑP,	EA,	EP,	OA			
ORITY	APP:	LN.	INFO	. :						US 2	007-	8899	09P	1	P 2	0070:	214

US 2007-948082P P 20070705

OTHER SOURCE(S):

MARPAT 149:315569

AB Pharmacol inhibition of fatty acid amide hydrolase (FAAH) activity leads to increased levels of fatty acid amides. Esters of alkylcarbamic acids are disclosed that are inhibitors of FAAH activity. Compds. disclosed herein inhibit FAAH activity. Described herein are processes for the preparation of esters of alkylcarbamic acid compds., compns. that include them, and methods of use thereof. Thus, to prepare a parenteral pharmaceutical composition for injection, 100 mg of a water-soluble salt of a compound of the

invention was dissolved in DMSO and mixed with 10 mL of 0.9% sterile saline; the mixture was incorporated into dosage form unit suitable for administration by injection.

IT 312753-06-3D, Indacaterol, derivs.

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (therapeutic release agents, esters of alkylcarbamic acids, as

inhibitors of fatty acid amide hydrolase activity) RN 312753-06-3 CA

CN 2(1H)-Quinolinone, 5-[(1R)-2-[(5,6-diethyl-2,3-dihydro-1H-inden-2-yl)amino]-1-hydroxyethyl]-8-hydroxy- (CA INDEX NAME)

Absolute stereochemistry.

L8 ANSWER 17 OF 76 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 149:307691 CA

TITLE: Novel combinat

Novel combination of spiroheterocyclicpiperidines to be used in the treatment of airway diseases,

especially chronic obstructive pulmonary disease (copd) and asthma

INVENTOR(S): Eriksson, Tomas;

Eriksson, Tomas; Hansson, Johan; Mensonides-Harsema,

Marguerite; Mo, John AstraZeneca AB, Swed.

SOURCE: PCT Int. Appl., 56pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT ASSIGNEE(S):

PATENT NO. KIND DATE APPLICATION NO. DATE

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WO 2008103126
                               20080828 WO 2008-SE50204
                         A1
                                                                  20080221
         W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ,
             CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES,
             FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE,
             KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD,
             ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH,
             PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM,
             TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
        RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU,
             IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK,
             TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD,
             TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW,
             AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
PRIORITY APPLN. INFO.:
                                           US 2007-891244P
                                                              P 20070223
OTHER SOURCE(S):
                        MARPAT 149:307691
GI
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* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

The present invention provides a pharmaceutical product comprising, in combination of, (a) a (therapeutically effective) dose of a first active ingredient, which is a compound of formula I [m = 0-2; n = 0-2; q = 0 or 1;p = 0-2; R1 = halo, CN, haloalkyl; R2 = (=0) or alkyl; R3 = H, OH, or NH2; R4 = H, OH, oxo, etc.; R5 = H, halo, OH, (un)substituted alkoxy; A = bond or alkyl; R8 = H or alkyl; R9 = halo, CN, alkoxy, or haloalkyl; X, Y and Z independently = bond, O, NH, CH2 or C(O), provided that only one of X, Y and Z is a bond, and provided that X and Y are not simultaneously O or C(0)] or a pharmaceutically acceptable salt thereof; and (b) a (therapeutically effective) dose of a second active ingredient, which is a glucocorticoid receptor agonist; and optionally, (c) a (therapeutically effective) dose of a third active ingredient, which is a β 2-agonist. The invention further relates to pharmaceutical compns. comprising said combination and to methods of treating treatment of airway diseases, especially chronic obstructive pulmonary disease (COPD) and asthma in mammals by administrating said combination. Select I are prepared, e.g., II.TFA was prepared via Wittig reaction of 4-fluoro-2-hydroxybenzaldehyde with Me (triphenylphosphoranylidene)acetate followed by hydrogenation, reaction with (2S)-oxiran-2-ylmethyl 3-nitrobenzenesulfonate, and hydrolysis and workup with TFA. Bioassays are described (no data). The invention further relates to a kit comprising the combination and use of said kit in treatment of airway diseases such as COPD and asthma.

IT 312753-06-3, Indacaterol

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(claimed co-drug; novel combination of spiroheterocyclicpiperidines to be used in the treatment of airway diseases, especially chronic obstructive pulmonary disease and asthma)

RN 312753-06-3 CA

CN 2(1H)-Quinolinone, 5-[(1R)-2-[(5,6-diethyl-2,3-dihydro-1H-inden-2-yl)amino]-1-hydroxyethyl]-8-hydroxy- (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 18 OF 76 CA COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 149:298766 CA

TITLE:

Selective Structure-Based Virtual Screening for Full and Partial Agonists of the \$2 Adrenergic

THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS

Receptor AUTHOR(S): de Graaf, Chris; Rognan, Didier

CORPORATE SOURCE:

Bioinformatics of the Drug, Institut Gilbert Laustriat CNRS UMR 7175-LC1, Universite Louis Pasteur

Strasbourg, Illkirch, 67401, Fr.

SOURCE: Journal of Medicinal Chemistry (2008), 51(16),

4978-4985

CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

The recently solved high-resolution X-ray structure of the β2 adrenergic receptor has been challenged for its ability to discriminate inverse agonists/antagonists from partial/full agonists. Whereas the X-ray structure of the ground state receptor was unsuitable to distinguish true ligands with different functional effects, modifying this structure to reflect early conformational events in receptor activation led to a receptor model able to selectively retrieve full and partial agonists by structure-based virtual screening. The use of a topol. scoring function based on mol. interaction fingerprints was shown to be mandatory to properly rank docking poses and achieve acceptable enrichments for partial and full agonists only.

312753-06-3, Indacaterol IT

RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); PRP (Properties); BIOL (Biological study)

(selective structure-based virtual screening for full and partial agonists of \$2 adrenergic receptor)

312753-06-3 CA RN

2(1H)-Quinolinone, 5-[(1R)-2-[(5,6-diethyl-2,3-dihydro-1H-inden-2-CN vl)aminol-1-hvdroxvethvll-8-hvdroxv- (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

95 THERE ARE 95 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 19 OF 76 CA COPYRIGHT 2009 ACS on STN 149:293749 CA

ACCESSION NUMBER:

TITLE:

Pharmaceutical combinations of bronchodilators and corticosteroids for treatment of airway diseases Lulla, Amar; Malhotra, Geena

INVENTOR(S): PATENT ASSIGNEE(S):

SOURCE:

Cipla Limited, India; Curtis, Philip Anthony PCT Int. Appl., 43pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

	TENT				KIN	D	DATE			APPL			NO.			ATE	
WO	2008	1021	28		A2 A3		2008			WO 2						080	
	W:	CA,	CH,	CN,	co,	CR,	AT, CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,	ES,
		KG,	KM,	KN,	KP,	KR,	GM, KZ, MX,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,
		PL, TN,	PT, TR,	RO, TT,	RS, TZ,	RU, UA,	SC, UG,	SD, US,	SE, UZ,	SG, VC,	SK, VN,	SL, ZA,	SM, ZM,	SV, ZW	SY,	TJ,	TM,
	RW:	IE,	IS,	IT,	LT,	LU,	CZ, LV, CI,	MC,	MT,	NL,	NO,	PL,	PT,	RO,	SE,	SI,	SK,
		TG,	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,			
IN PRIORIT	2007 Y APP				A		2008	1024		IN 2 IN 2 IN 2	007-	MU31	4	1	A 2	0070: 0070: 0070:	219

IN 2007-MU2179 A 20071101 A pharmaceutical combination comprising (a) a combination of two or more bronchodilators; or (b) a combination of at least one bronchodilator in combination with at least one corticosteroid for simultaneous or sequential administration. A combination is used in the prevention or treatment of respiratory, inflammatory or obstructive airway diseases.

Thus, an aerosol formulation was prepared comprising ciclesonide 16 mg, formoterol 0.96 mg, ethanol 224 mg, lecithin 0.0034 mg, and propellant HFA227 11.0 $\alpha.$

IT 312753-06-3, Indacaterol

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(inhalant compns. comprising combinations of bronchodilators and corticosteroids for treatment of airway diseases)

RN 312753-06-3 CA

CN 2(1H)-Quinolinone, 5-[(1R)-2-[(5,6-diethyl-2,3-dihydro-1H-inden-2yl)amino]-1-hydroxyethyl]-8-hydroxy- (CA INDEX NAME)

Absolute stereochemistry.

L8 ANSWER 20 OF 76 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 149:259111 CA

TITLE: Bronchodilator efficacy of indacaterol, a novel

once-daily \$2-agonist, in patients with

persistent asthma

AUTHOR(S): Pearlman, David S.; Greos, Leon; LaForce, Craig; Orevillo, Chadwick J.; Owen, Roger; Higgins, Mark

CORPORATE SOURCE: Colorado Allergy and Asthma Centers, Denver, CO, USA SOURCE: Annals of Allergy, Asthma, & Immunology (2008),

101(1), 90-95

CODEN: ALAIF6; ISSN: 1081-1206

PUBLISHER: American College of Allergy, Asthma, & Immunology DOCUMENT TYPE: Journal

LANGUAGE: English

AB Indacaterol is a novel once-daily inhaled β2-agonist in development

from the treatment of patients with asthma or chronic obstructive pulmonary disease. To investigate the bronchodilator efficacy of indacaterol in patients with persistent asthma. Patients received a randomized sequence of single doses of indacaterol, 400 μg , via single-dose dry powder inhaler (SDDF1); indacaterol, 200 μg , via multidose dry powder inhaler (MDDF1) and placebo. At each visit, the forced expiratory volume in 1 s (FEV1) was recorded at a series of time points during a 24-h period. Of 33 patients screened, 25 were randomized to treatment. Adjusted mean FEV1 was significantly higher ($\mathbb{P} \le .005$) for both indacaterol doses vs placebo at most time points. The first time points at which statistically significant treatment differences were observed for indacaterol and placebo in FEV1 were 0.17 L at 5 min after dosing for 400 μg of indacaterol

(SDDPI) and 0.21 L at 10 min for 200 µg of indacaterol (MDDPI) (both P < .001 vs placebo). Differences relative to placebo at the final time point, 24 h after dosing, were 0.29 L and 0.15 L for indacaterol, 400 μq and 200 μq, resp. (both P ≤ .003 vs placebo). Overall, FEV1 was significantly higher for the 400-µg dose compared with the 200-µq dose from 15 min to 2 h after dosing (P ≤ .013) and from 5 h onward (P ≤ .022). Indacaterol was associated with good tolerability and safety. Indacaterol demonstrates sustained bronchodilator efficacy throughout the full 24-h period, with a rapid onset of action and a good overall safety profile.

312753-06-3, Indacaterol

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(indacaterol \$2-agonist at 400µg via single-dose dry powder inhaler showed sustained bronchodilator efficacy and safety in patient with persistent asthma)

RN 312753-06-3 CA

CN 2(1H)-Quinolinone, 5-[(1R)-2-[(5,6-diethyl-2,3-dihydro-1H-inden-2v1)amino]-1-hvdroxvethv1]-8-hvdroxv- (CA INDEX NAME)

Absolute stereochemistry.

15 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 21 OF 76 CA COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 149:119641 CA

TITLE: Combination therapy for the treatment of airways

disease PATENT ASSIGNEE(S):

Novartis AG, Switz. SOURCE: Eur. Pat. Appl., 20pp.

CODEN: EPXXDW DOCUMENT TYPE: Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

REFERENCE COUNT:

PATENT NO. KIND DATE APPLICATION NO. A1 20080702 EP 2006-126840 EP 1938822 R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL,

THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS

BA, HR, MK, RS WO 2008074856 A1 20080626 WO 2007-EP64288 20071220 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM PRIORITY APPLN. INFO.: EP 2006-126840 A 20061221 AB A medicament that comprises, sep. or together (A) a quinolinone compound described herein; and (B) an antibacterial agent; for simultaneous, sequential or sep. administration in the treatment of an inflammatory, infective or obstructive airways disease. 312753-16-5 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (combination therapy for treatment of airways disease)

2(1H)-Quinolinone, 5-[2-[(2,3-dihydro-1H-inden-2-yl)amino]-1-hydroxyethyl]-

OH H N O

312753-16-5 CA

8-hvdroxv- (CA INDEX NAME)

REFERENCE COUNT:

CH-CH₂-NH

RN

CN

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 22 OF 76 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 149:96028 CA
TITLE: Combination therapy for the treatment of airways

disease

INVENTOR(S): Higgins, Mark Nicholas

PATENT ASSIGNEE(S): Novartis AG, Switz.
SOURCE: PCT Int. Appl., 28pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

WO 2008074856 20080626 WO 2007-EP64288 A1 20071220 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM EP 1938822 A1 20080702 EP 2006-126840 R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, RS PRIORITY APPLN. INFO.: EP 2006-126840 A 20061221 MARPAT 149:96028 OTHER SOURCE(S): A medicament that comprises, sep. or together (A) a guinolinone compound described here; and (B) an antibacterial agent; for simultaneous, sequential or sep. administration in the treatment of an inflammatory. infective or obstructive airways disease. 312753-16-5 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL

RN 312753-16-5 CA
CN 2(1H)-Quinolinone, 5-[2-[(2,3-dihydro-1H-inden-2-yl)amino]-1-hydroxyethyl]8-hydroxy- (CA INDEX NAME)

(combination therapy for treatment of airways disease)

REFERENCE COUNT:

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 23 OF 76 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 149:62726 CA

(Biological study); USES (Uses)

TITLE: Processes for taste-masking of inhaled formulations
INVENTOR(S): Schuster, Jeffrey A.; Cipolla, David C.; Farr, Stephen

PATENT ASSIGNEE(S): Aradigm Corporation, USA SOURCE: U.S. Pat. Appl. Publ., 9pp.

CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

Page 31

PATENT NO.

	US 20080138397	A1	20080612	US 2007-876407	20071022
PRIOR	RITY APPLN. INFO.:			US 2006-862751P	P 20061024
AB	The present invention	n prov	ides novel pr	ocesses and method	ologies to
	minimize the bitter	or other	erwise unplea	sant taste, to min	imize the
	tendency to stimulat	e the	cough reflex,	or to minimize or	opharyngeal
	deposition of active	e compda	s. administer	ed by the pulmonar	y/inhalation
	route and to deliver	hydro:	xychloroquine	(HCQ) either sing	ularly or in
	combination with an	antima.	larial and ar	ninoquinolone by th	e -
	pulmonary/inhalation	route	in a sustair	ed release or othe	r formulation.
	The formulation mini	imizes t	the bitter or	otherwise unpleas	ant taste of HCQ
	or any potential to	stimula	ate the cough	reflex, and to de	liver a
	dopaminergic compour	nd or it	ts prodrug, i	ncluding ABT-431 b	y the
	pulmonary/inhalation	route	in a sustair	ed release or othe	r formulation.
	The formulation also	delive	ers an antibi	otic, including du	ramycin by the
	pulmonary/inhalation	route	in a sustair	ed release that mi	nimizes the
	pulmonary/inhalation The formulation also	route delive	in a sustair ers an antibi	ed release or othe otic, including du	r formulation. ramycin by the

APPLICATION NO.

DATE

KIND DATE

irritation. 312753-06-3

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (processes for taste-masking of inhaled formulations)

unpleasant taste of the drug or any potential to stimulate throat

312753-06-3 CA

CN 2(1H)-Quinolinone, 5-[(1R)-2-[(5,6-diethyl-2,3-dihydro-1H-inden-2v1)amino]-1-hvdroxvethv1]-8-hvdroxv- (CA INDEX NAME)

Absolute stereochemistry.

L8 ANSWER 24 OF 76 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 148:417677 CA

TITLE: Indacaterol provides sustained 24 h bronchodilation on once-daily dosing in asthma: a 7-day dose-ranging

study AUTHOR(S): LaForce, C.; Alexander, M.; Deckelmann, R.; Fabbri, L.

M.; Aisanov, Z.; Cameron, R.; Owen, R.; Higgins, M. Department of Pediatrics, University of North Carolina CORPORATE SOURCE: Clinical Research, Raleigh, NC, USA

SOURCE: Allergy (Oxford, United Kingdom) (2008), 63(1),

103-111

CODEN: LLRGDY; ISSN: 0105-4538

AB

PUBLISHER: Blackwell Publishing Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English

> Background: Indacaterol is a novel, once-daily \$2-agonist in development for the treatment of asthma and chronic obstructive pulmonary disease. Studies were required to determine optimal dose(s) for continuing investigation. Objective: A dose-ranging study was undertaken to evaluate efficacy and safety of indacaterol. Methods: A total of 436 patients with persistent asthma receiving inhaled corticosteroids were randomized to 7 days treatment with once-daily indacaterol 50, 100, 200, or 400 µg via multi-dose dry-powder inhaler (MDDP1; Certihaler), indacaterol 400 µg via single-dose dry-powder inhaler (SDDPI), or placebo. Serial 24-h spirometry was performed on days 1 and 7. Vital signs, laboratory evaluations, and adverse events were monitored. Results: All doses of indacaterol increased the mean time-standardized area under the curve of forced expiratory volume in 1 s (FEV1) from 22 to 24 h postdose (P < 0.001 vs placebo) on days 1 and 7, with clin. relevant treatment-placebo differences of 240, 260, 350, 300, and 380 mL on day 1 and 230, 220, 320, 250, and 270 mL on day 7 for indacaterol 50, 100, 200, and 400 µg via MDDPI and 400 µg via SDDPI, resp. All doses increased mean FEV1 (P < 0.05 vs placebo) from 5 min to 24 h postdose on days 1 and 7. All doses were well tolerated. Most adverse events were mild-to-moderate in seventy: most frequently reported were respiratory, thoracic, and mediastinal disorders. Conclusion: Once-daily dosing with indacaterol provided sustained 24-h bronchodilation in patients with moderate-to-severe asthma, with a satisfactory overall safety profile. Indacaterol 200 µg appears the optimum dose, offering the best efficacy/safety balance.

IT 312753-06-3, Indacaterol

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(once-daily indacaterol dose via Certihaler and single-dose dry-powder inhaler was safe, tolerable and provided sustained 24-h bronchodilation in patient with moderate-to-severe asthma)

RN 312753-06-3 CA

CN

2(1H)-Quinolinone, 5-[(1R)-2-[(5,6-diethyl-2,3-dihydro-1H-inden-2-yl)amino]-1-hydroxyethyl]-8-hydroxy- (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

AUTHOR(S):

L8 ANSWER 25 OF 76 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 148:346682 CA

TITLE: Efficacy and safety of single therapeutic and

supratherapeutic doses of indacaterol versus salmeterol and salbutamol in patients with asthma Brookman, Laurence J.; Knowles, Lisa J.; Barbier,

Michaela; Elharrar, Brigitte; Fuhr, Rainard; Pascoe, Steve

CORPORATE SOURCE: Novartis Horsham Research Centre, Horsham, UK

SOURCE: Current Medical Research and Opinion (2007), 23(12),

3113-3122 CODEN: CMROCX; ISSN: 0300-7995

PUBLISHER: Informa Healthcare

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Objective: This study compared the bronchodilator efficacy and safety of indacaterol with placebo, salbutamol and salmeterol, in patients with persistent asthma, at single therapeutic and supratherapeutic doses. Research design and methods: This was a randomized, open-label crossover study in adult subjects with asthma (forced expiratory volume in 1 s [FEV1] ≥ 60% predicted). In part A, patients (n = 20) received single doses of indacaterol 200 µq, salbutamol 200 µq, salmeterol 50 µq and placebo. In part B, patients (n = 19) received single doses of indacaterol 1000 µg, salbutamol 1000 µg, salmeterol 250 µg and placebo. Main outcomes measures; Results: For the primary endpoint, FEV1 area under the effect curve during 0-24 h, indacaterol 200 µg was statistically superior to placebo and salbutamol. Indacaterol 200 µg FEV1 was higher than placebo (5 min to 24 h), salbutamol 200 µg (4-24 h), and salmeterol 50 µg (5 and 15 min and 22 and 24 h). Few adverse events were reported; all were mild or moderate in severity. Initial changes were observed in glucose, potassium, heart rate and QTc interval, but all values remained within normal ranges. Values matched placebo levels after a shorter time for indacaterol 1000 µg than for salmeterol 250 μq. Conclusions: In this single-dose, open-label study, indacaterol 200 μg provided effective 24-h bronchodilation, with a longer duration than salmeterol 50 µg and a good overall safety profile. The sustained bronchodilation of indacaterol 1000 µg was not associated with sustained systemic adverse effects.

312753-06-3, Indacaterol

RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); PKT (Pharmacokinetics); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(single therapeutic or supratherapeutic doses of indacaterol showed effective 24-h bronchodilation with longer duration and overall safety profile compared to salmeterol and salbutamol in adult with persistent asthma)

RN 312753-06-3 CA

2(1H)-Quinolinone, 5-[(1R)-2-[(5,6-diethyl-2,3-dihydro-1H-inden-2-CN v1)amino]-1-hydroxyethy1]-8-hydroxy- (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 26 OF 76 CA COPYRIGHT 2009 ACS on STN 148:315167 CA

Patent

ACCESSION NUMBER:

TITLE:

Polymorphic crystal form of a

indan-2-ylamino-hydroxyethyl-quinolinone maleate derivative as beta-adrenoceptor agonist

INVENTOR(S): Lohse, Olivier; Monnier, Stephanie; Jordine, Guido PATENT ASSIGNEE(S): Novartis AG, Switz.

SOURCE: PCT Int. Appl., 25pp. CODEN: PIXXD2

DOCUMENT TYPE: LANGUAGE:

English FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	ENT :				KIN	D	DATE					ION I			D.	ATE	
	2008				A1		2008	0306							2	0070	830
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,	CA,
		CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,	ES,	FΙ,
							GT,										
		KM,	KN,	KΡ,	KR,	ΚZ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,	ME,
							MY,										
							SD,							SY,	ТJ,	TM,	TN,
							US,										
	RW:						CZ,										
							MC,										
							GA,										
							ΜZ,		SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,
							TJ,										
EP	1914																
	R:						CZ,										
						LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	AL,
			HR,														
	2007																
	2659																
EP	2066																
	R:						CZ,										
		ıs,	IT,	Ll,	LT,	LU,	LV,	MC,	MT,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,

AL, BA, HR, MK, RS TN 2009DN00466 20090612 IN 2009-DN466 20090120 Α NO 2009001234 20090330 NO 2009-1234 20090324 Α KR 2009049615 Α 20090518 KR 2009-706531 20090330 PRIORITY APPLN. INFO .: EP 2006-119895 20060831 WO 2007-EP59039 W 20070830

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$$\frac{1}{100}$$
 $\frac{1}{100}$ $\frac{1}$ $\frac{1}{100}$ $\frac{1}{100}$ $\frac{1}{100}$ $\frac{1}{100}$ $\frac{1}{100}$

AB New polymorphic crystal form of (R)-5-[2-(5,6-diethyl-indan-2-ylamino)-1-hydroxyethyl]-8- hydroxy-lH -quinolin-2-one maleate (I) designated crystal form Qalpha that is useful in the treatment of inflammatory or obstructive airways diseases are claimed. A method for preparing crystal form Qalpha is also described. Thus, 50 mg (R)-5-[2-(5,6-diethyl-indan-2-ylamino)-1-hydroxyethyl]-8-hydroxy-lH-quinolin-2-one maleate was equilibrated in 1 mixture of 90% ethanol, 5% water, and 5% isopropanol over 3 days at 25°C. The product was then filtered and dried for 10 min in the air to obtain white crystals.

T 753498-25-8P

RL: PRP (Properties); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (polymorphic crystal form of indan-2-ylamino-hydroxyethyl-quinolinone maleate derivative as beta-adrenoceptor agonist)

753498-25-8 CA

2(1H)-Quinolinone, 5-[(1R)-2-[(5,6-diethyl-2,3-dihydro-1H-inden-2-yl)amino]-1-hydroxyethyl]-8-hydroxy-, (2Z)-2-butenedioate (1:1) (CA INDEX NAME)

CM 1

RN

CN

CRN 312753-06-3 CMF C24 H28 N2 O3

Absolute stereochemistry.

CM 2

CRN 110-16-7 CMF C4 H4 O4

Double bond geometry as shown.

HO₂C CO2H

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 27 OF 76 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER:

TITLE:

CORPORATE SOURCE:

AUTHOR(S):

SOURCE:

Tolerability of indacaterol, a novel once-daily β2-agonist, in patients with asthma: a

randomized, placebo-controlled, 28-day safety study

Yang, Wiliam H.; Martinot, Jean Benoit; Pohunek, Petr; Beier, Jutta; Magula, Daniel; Cameron, Ray; Owen,

Roger: Higgins, Mark

Allergy and Asthma Research Centre, Ottawa, ON, Can.

Annals of Allergy, Asthma, & Immunology (2007), 99(6), 555-561

148:299514 CA

CODEN: ALAIF6; ISSN: 1081-1206

PUBLISHER: American College of Allergy, Asthma, & Immunology DOCUMENT TYPE:

Journal

LANGUAGE: English

AB Background: Indacaterol is a novel, inhaled, once-daily β2-agonist. Objective: To investigate the safety and tolerability of indacaterol at doses of 400 and 800 μ g/d. Methods: Randomized, double-blind, placebo-controlled, parallel-group, multicenter, 28-day study. Patients with persistent asthma (forced expiratory volume in 1 s [FEV1] ≥60% predicted, ≤1,600 μg of beclomethasone dipropionate or equivalent daily) received indacaterol, 400 μg (n = 59) or 800 μg (n = 59), or placebo (n = 26) once daily via a single-dose dry powder inhaler. Safety assessments were performed before and after dosing on days 1, 14, and 28,

with particular attention to key β2-agonist safety variables. Results: A total of 144 patients were randomized, with 135 (93.8%) completing the study. Indacaterol was well tolerated: the incidence of adverse events (AEs) was similar between the active and placebo groups, and AEs, when they occurred, were mild or moderate for most (98.2%). There was no dose-response relationship between indacaterol and the incidence of AEs (400 µg, 40.7%; 800 µg, 37.3%; and placebo, 38.5%). Few AEs considered as β2-agonist class effects occurred (none leading to withdrawal). Small differences between indacaterol and placebo in mean serum potassium (≤-0.29 mmol/L) and glucose (≤0.93 mmol/L) levels were occasionally statistically significant (P < .05) but not regarded as clin. meaningful. As expected for a β2-agonist, there was some indication of a trend in QTc prolongation with increasing exposure (maximum mean change, 8.9 ms; P < .05 vs placebo). Significant increases in FEV1 (P < .05) were seen at all postbaseline time points for both indacaterol doses vs placebo, with indacaterol-placebo differences 30 min after dosing of 0.21 to 0.25 L and before dosing on days 14 and 28 (approx. 24 h after the previous dose) of 0.15 to 0.23 L. Conclusion: Indacaterol had a good overall safety profile and was well tolerated at both doses, with predose FEV1 results on days 14 and 28 indicating 24-h bronchodilator efficacy.

IT 312753-06-3, Indacaterol

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(400 and 800 μg indacaterol once-daily was safe, well tolerated and showed bronchodilator activity in patient with persistent asthma) 312753-06-3 CA

2(1H)-Quinolinone, 5-[(1R)-2-[(5,6-diethyl-2,3-dihydro-1H-inden-2-yl)amino]-1-hydroxyethyl]-8-hydroxy- (CA INDEX NAME)

Absolute stereochemistry.

RN

CN

20

REFERENCE COUNT:

THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 28 OF 76 CA COPYRIGHT 2009 ACS on STN ACCESSION NOMBER: 148:175952 CA Metered dose dispensers for INVENTOR(S): Jinks, Philip A.; Hodson, I SOURCE: PATENT ASSIGNEE(S): SOURCE: PCT Int. Appl., 93pp.

148:175952 CA
Metered dose dispensers for aerosols
Jinks, Philip A.; Hodson, Peter D.; Hansen, Paul E.
3M Innovative Properties Company, USA
PCT Int. Appl., 93pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE WO 2008014161 A1 20080131 WO 2007-US73764 20070718 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM A1 20090408 EP 2007-813048 EP 2043718 20070718 R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, RS TN 2009CN00437 A 20090605 TN 2009-CN437 A 20060724 PRIORITY APPLN. INFO.: GB 2006-14621 WO 2007-US73764 W 20070718

AB A pressurized metered dose dispenser for dispensing an aerosol formulation comprises particles of a medicament suspended in liquefied propellant, optionally in combination with one or more excipients, the dispenser comprising an aerosol container equipped with a metered dose valve, where a formulation chamber is defined in part by the internal walls of the container, and wherein the dispenser further comprises a porous, fluid permeable, particulate semi-permeable body located within the formulation chamber adjacent to the metered dose valve. A suspension aerosol formulation contains micronized Brilliant Blue food dye, submicron anhydrous lactose, oleic acid, dehydrated ethanol, and HFA 134a.

IT 31273-06-3, Indacaterol

RL: TEM (Technical or engineered material use); THU (Therapeutic use);

- BIOL (Biological study); USES (Uses)
- (metered dose dispensers for aerosols)
- RN 312753-06-3 CA
- CN 2(1H)-Quinolinone, 5-[(1R)-2-[(5,6-diethyl-2,3-dihydro-1H-inden-2-yl)amino]-1-hydroxyethyl]-8-hydroxy- (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 29 OF 76 CA COPYRIGHT 2009 ACS on STN 148:159629 CA

ACCESSION NUMBER:

TITLE:

SOURCE:

Pharmacological characterization of indacaterol, a novel once daily inhaled \$2 adrenoceptor agonist, on small airways in human and rat precision-cut lung

slices AUTHOR(S):

Sturton, Richard G.; Trifilieff, Alexandre; Nicholson, Andrew G.; Barnes, Peter J.

CORPORATE SOURCE: Thoracic Medicine, National Heart and Lung Institute, London, UK

Journal of Pharmacology and Experimental Therapeutics (2008), 324(1), 270-275

CODEN: JPETAB; ISSN: 0022-3565

PUBLISHER: American Society for Pharmacology and Experimental

Therapeutics Journal

DOCUMENT TYPE:

LANGUAGE: English

Indacaterol is a novel once daily inhaled \$2 adrenoceptor agonist in clin. development. This study compared the properties of indacaterol with salmeterol, formoterol, and albuterol on small airways in precision-cut lung slices from human and rat contracted with carbachol and serotonin, resp. In human lung slices, the rank order of potency was formoterol ≥ salmeterol > indacaterol > albuterol, resp. Indacaterol had similar intrinsic efficacy to formoterol, followed by albuterol and salmeterol. The onset of action was fast for albuterol, formoterol, and indacaterol, whereas it was significantly slower for salmeterol. The duration of action ranking was indacaterol > salmeterol > formoterol > albuterol. When compared with human lung slices, in the rat lung slices, similar potency, intrinsic efficacy, and onset of action were observed for indacaterol, formoterol, and salmeterol. Albuterol had an increased potency when compared with human lung slices and a slower onset of action. In conclusion, our results show that the human lung slice system seems to be a good model to study the clin. properties of inhaled long-acting B2 adrenoceptor agonists and that caution is needed extrapolating from rat model to humans. Finally, using the human lung slice model, we have characterized indacaterol as a fast acting compound with a longer duration of action than salmeterol and formoterol.

312753-06-3, Indacaterol

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL

(Biological study); USES (Uses)

(pharmacol. characterization of indacaterol, a novel once daily inhaled β2 adrenoceptor agonist, on small airways in human and rat precision-cut lung slices)

RN 312753-06-3 CA

CN 2(1H)-Quinolinone, 5-[(1R)-2-[(5,6-diethyl-2,3-dihydro-1H-inden-2-yl)aminol-1-hydroxyethyl)-8-hydroxy- (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 30 OF ACCESSION NUMBER:

TITLE:

INVENTOR(S):

PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

ANSWER 30 OF 76 CA COPYRIGHT 2009 ACS on STN

148:128252 CA Compositions of glycopyrronium salt for inhalation Haeberlin, Barbara; Stowasser, Frank; Wirth, Wolfgang; Baumberger, Anton; Abel, Stephan; Kaerger, Sebastian; Kleckbusch, Thomas

Novartis A.-G., Switz.; Novartis Pharma G.m.b.H. PCT Int. Appl., 19 pp. CODEN: PIXXD2

CODEN: PIXXD2
Patent
English
1

ENT				KIN	D	DATE		i	APPL	ICAT				D	ATE	
2008				A1	-	2008	0103	1	WO 2		EP57			2	0070	628
W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,	CA,
CH, CN, C GB, GD, G			co,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,	ES,	FI,
	GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,
KM, KN, KI			KP,	KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,	ME,
KM, KN, K MG, MK, M			MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,
	PT,	RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	TJ,	TM,	TN,
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RW:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,
	IS,	IT,	LT,	LU,	LV,	MC,	MT,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,
	BJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG,	BW,
	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,

BY, KG, KZ, MD, RU, TJ, TM AII 2007264000 20080103 AU 2007-264000 20070628 A1 CA 2655381 20080103 CA 2007-2655381 20070628 A1 EP 2037879 A1 20090325 EP 2007-764925 20070628 R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, RS 20090320 IN 2008-DN10441 IN 2008DN10441 Α 20081217 MX 2008-16356 MX 2008016356 Α 20090116 20081218 KR 2009023650 Α 20090305 KR 2008-731818 20081229 CN 101484134 Α 20090715 CN 2007-80025015 20081230 PRIORITY APPLN. INFO.: GB 2006-13161 20060630 WO 2007-EP5744 20070628

A process for preparing dry powder formulations of a glycopyrronium salt for inhalation that have good stability. The process involves (a) micronizing a glycopyrronium salt together with an anti-adherent agent, and (b) admixing carrier particles to form the dry powder formulation.

IT 312753-06-3, Indacaterol

RL: BSU (Biological study, unclassified); BIOL (Biological study) (compns. of glycopyrronium salt for inhalation)

312753-06-3 CA RN

CN 2(1H)-Ouinolinone, 5-[(1R)-2-[(5,6-diethyl-2,3-dihydro-1H-inden-2yl)amino]-1-hydroxyethyl]-8-hydroxy- (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 31 OF 76 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 148:128248 CA

TITLE: A pharmaceutical composition comprising an IKK2 inhibitor and a second active ingredient.

INVENTOR(S): Andersson, Paul; Boerjesson, Lena; Eriksson,

Christina; Larsson, Joakim PATENT ASSIGNEE(S): Astrazeneca A/B, Swed. PCT Int. Appl., 57pp.

CODEN: PIXXD2 DOCUMENT TYPE: Pat.ent.

LANGUAGE: English FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

SOURCE:

_	W: AE, AG, CH, CN, GB, GD, GB, GD, GB, GB, GB, GB, GB, GB, GB, GB, GB, GB					KIN	D	DATE									ATE	
	WO 2008002246 W: AE, AG, CH, CN, GB, GD, KM, KN, MK, MN, RO, RS, TI, TZ, RW: AT, BE, IS, IT, BJ, CF, GH, GM, BY, KG,					A1	_	2008	0103									
		W:	AE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,	CA,
			CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,	ES,	FI,
			GB,	GD,	GE,	GH,	GM,	GT.	HN,	HR,	HU,	ID,	IL,	IN,	IS.	JP,	KE,	KG,
			KM,	KN,	KP,	KR,	KZ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,	MG,
			MK,	MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,
			RO,	RS.	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	TJ,	TM.	TN.	TR,
			TT.	TZ.	UA.	UG.	US,	UZ.	VC.	VN.	ZA.	ZM.	ZW					
		RW:												FR.	GB.	GR.	HU,	IE,
						A1 20080103 W0 2007-St L, AM, AT, AU, AZ, BA, BB, BG, E L, CR, CU, CZ, DE, DK, DM, DO, I B, CR, CU, CZ, DE, DK, DM, DO, I C, KR, KZ, LA, LC, LK, LR, LS, I MX, MY, MY, MZ, NA, NG, NI, NO, N J, SC, SD, SE, SG, SK, SL, SM, SA, UG, US, UZ, VC, VN, ZA, ZM, Z B, CH, CY, CZ, DE, DK, EE, ES, E T, LU, LV, MC, MT, NL, PL, PT, E G, CI, CM, GA, GN, GQ, GW, ML, L MD, RU, TJ, TM US 2006-81 MARPAT 148:128248							,					
PRIORI	TY	APP:					,	,			US 2	006-	8169	96P	1	P 2	0060	628
OTHER	WO 2008002246 A1 20080103 WO 2007-SE622 20070626																	
											utic	al c	nomon:	s. c	ompr.	isin	an an	IKK2

OTHE AB inhibitor and a second active ingredient, and their use in therapy.

312753-06-3

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(pharmaceutical composition comprising IKK2 inhibitor and second active ingredient)

312753-06-3 CA RN

CN 2(1H)-Quinolinone, 5-[(1R)-2-[(5,6-diethyl-2,3-dihydro-1H-inden-2yl)amino]-1-hydroxyethyl]-8-hydroxy- (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

6 L8 ANSWER 32 OF 76 CA COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 148:106207 CA TITLE:

Ouinolinone derivatives in salt or solvate form and their pharmaceutical compositions for treating obstructive airway diseases and inflammation mediated by the β2-adrenoreceptor

INVENTOR(S): Lohse, Olivier; Monnier, Stephanie; Reber, Jean-Louis PATENT ASSIGNEE(S): Novartis AG, Switz.; Novartis Pharma GmbH

SOURCE: PCT Int. Appl., 43 pp. CODEN: PIXXD2 DOCUMENT TYPE: Patent

English

LANGUAGE: FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

KIND DATE APPLICATION NO. DATE PATENT NO. WO 2008000839 A1 20080103 WO 2007-EP56632 20070702 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM 1878/22 BG, AI, 20080116 EP 2006-117129 20060713 R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, EP 1878722 BA, HR, MK, YU AU 2007-264946 A1 20080103 AU 2007-264946 CA 2654801 A1 20080103 CA 2007-2654801 EP 2004-005 A1 20090408 EP 2007-818989 20070702 20070702 R: AI, BE, TI, LI, LT, LU, LV,
AL, BA, HR, MK, RS
IN 2008N015642 A 20090119 MX 2008-16542 20081229
KR 2009023651 A 20090708 KR 2008-731819 20081229
CN 101479245 A 20090708 CN 207-80024404 20081229
NO 2009000312 A 20090128 NO 2009-312 20090120
PRIORITY APPLN. INFO:

FROM THE COMPANY OF R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,

AB Ouinolinone derivative compds. in salt or solvate form are useful for treating diseases mediated by the $\beta 2$ -adrenoreceptor. Pharmaceutical compns.

that contain the compds. and processes for preparing the compds. are also described. Thus, for the preparation of

(R)-5-[2-(5,6-diethylindan-2-ylamino)-1-hydroxyethyl]-8-hydroxy-1H-

quinolin-2-one hydrogen succinate, suspension of 2.312 q

(R)-5-[2-(5,6-diethylindan-2-ylamino)-1-hydroxyethyl]-8-hydroxy-1Hquinolin-2-one base (5.890 mmoles) and 0.695 g succinic acid (5.890

mmoles) in 50 mL isopropanol was heated to 80°C and stirred.

Crystallization took place spontaneously after .apprx.5 min; yield: 2.89 g

white powder (96.3%).

IT 936910-08-6P

CN

RL: PEP (Physical, engineering or chemical process); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)

(quinolinone derivs. in salt or solvate form and their pharmaceutical compns. for treating obstructive airway diseases and inflammation mediated by the $\beta 2$ -adrenoreceptor)

RN 936910-08-6 CA

2(1H)-Quinolinone, 5-[(1R)-2-[(5,6-diethyl-2,3-dihydro-1H-inden-2-yl)amino]-1-hydroxyethyl]-8-hydroxy-, hydrochloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.

HC1

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 33 OF 76 CA COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 148:70158 CA

TITLE: Methods of using a thiazole derivative

INVENTOR(S): Molfino, Nestor A.; Saito, Kosuke; Nagamoto, Hisashi

PATENT ASSIGNEE(S): Otsuka Pharmaceutical Co., Ltd., Japan

SOURCE: PCT Int. Appl., 77 pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	ENT :	NO.			KIN	D	DATE			APPL	ICAT	ION I	.00		D	ATE	
						_											
WO	2007	1488	06		A1		2007	1227		WO 2	007-	JP62	640		2	0070	618
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,	CA,
		CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,	ES,	FI,
		GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,
		KM,	KN,	KP,	KR,	KZ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,	ME,
		MG,	MK,	MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,
		PT,	RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	TJ,	TM,	TN,
		TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW				
	RW:	AT.	BE.	BG.	CH.	CY.	CZ.	DE.	DK.	EE.	ES.	FT.	FR.	GB.	GR.	HU.	TE.

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IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF,
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             GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
             BY, KG, KZ, MD, RU, TJ, TM
     AU 2007261951
                          A1
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                                20071227
                                                                    20070618
     CA 2655296
                          A1
                                20071227
                                            CA 2007-2655296
                                                                    20070618
     EP 2040686
                          A1
                                20090401
                                            EP 2007-767448
                                                                    20070618
         R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LI, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR,
             AL, BA, HR, MK, RS
     MX 2008015380
                          Α
                                20081215
                                            MX 2008-15380
                                                                    20081202
     KR 2009021176
                          Α
                                20090227
                                            KR 2008-731044
                                                                    20081219
     CN 101472570
                          Α
                                20090701
                                            CN 2007-80023048
                                                                    20081219
PRIORITY APPLN. INFO.:
                                            US 2006-814545P
                                                                  20060619
                                            WO 2007-JP62640
                                                                 W 20070618
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AB This invention relates to a method of treating a disease, disorder, or condition in a patient comprising administering to a patient a therapeutically effective amount of a thiazole derivative, tetomilast. The invention further relates to the administration of at least one \$\beta^2\$-adrenergic receptor agonist, with tetomilast for treating a disease, disorder, or condition. The invention further relates to the administration of an anti-inflammatory steroid, with tetomilast and at least one beta2-adrenergic receptor agonist for treating a disease, disorder, or condition.

IT 312753-33-6

RN

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(5-[2-(5,6-Diethylindan-2-ylamino)-1-hydroxyethyl]-8-hydroxy-1H-quinolin-2-one; using thiazole derivative for respiratory disease therapy) 312753-33-6 CA

CN 2(1H)-Quinolinone, 5-[2-[(5,6-diethyl-2,3-dihydro-1H-inden-2-yl)amino]-1hydroxyethyl]-8-hydroxy- (CA INDEX NAME)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 34 OF 76 CA COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 147:455537 CA

TITLE: Aerosol formulation comprising 6α , 9α -difluoro- 17α -[(2-

furanylcarbonyl)oxy]-11 β -hydroxy-16 α -methyl-3-oxoandrosta-1,4-diene-17 β -carbothioic acid S-fluoromethyl ester

INVENTOR(S): Capecchi, John T.; Stefely, James S.
PATENT ASSIGNEE(S): 3M Innovative Properties Company, USA

SOURCE: PCT Int. Appl., 47pp. CODEN: PIXXD2 DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

PATE	NT INFORMATI	ON:						
	PATENT NO.		KIND		APPLICA			ATE
	WO 20071179				WO 2007-			
					BA, BB, BG,			
					DK, DM, DZ			
					HU, ID, IL			
					LR, LS, LT,			
					NI, NO, NZ			
					SL, SM, SV, ZA, ZM, ZW	, SY, TJ,	IM, IN,	TR, TT,
					DK, EE, ES,	FT FD	GB GP	HII TE
					NL, PL, PT,			
					GQ, GW, ML			
					SD, SL, SZ			
				, TJ, TM				
					AU 2007-			
					CA 2007-			
					EP 2007-			
					DK, EE, ES, MT, NL, PL,			
		BA, HR,			MI, NL, PL	, F1, RO,	SE, SI,	SK, IK,
					US 2008-	-293205	2	0080916
PRIC	RITY APPLN.				US 2006-	-784670P	P 2	0060322
					WO 2007-	-US64512	W 2	0070321
AB					tical aeros			cludes a
					particulate	e medicam	ent	
	6α,9α-diflu							
					1,4-diene-1 er or a sol			
					of 1,1,1,2-			
								ocompatible
	polymer.	,						
IT	312753-06-3							
					ological st	ıdy); USE	S (Uses)	
				mprising				
					rbonyl)oxy]			
					,4-diene-17	5-		
	carpothi	OIC acid	ı ⊳−fiuo	romethyl	ester)			

2(1H)-Quinolinone, 5-[(1R)-2-[(5,6-diethyl-2,3-dihydro-1H-inden-2yl)amino]-1-hydroxyethyl]-8-hydroxy- (CA INDEX NAME)

Absolute stereochemistry.

RN 312753-06-3 CA

CN

L8 ANSWER 35 OF 76 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 147:440002 CA

TITLE: Safety, tolerability and efficacy of indacaterol, a

novel once-daily β2-agonist, in patients with COPD: A 28-day randomized, placebo controlled clinical

trial

AUTHOR(S): Beier, Jutta; Chanez, Pascal; Martinot, Jean-Benoit; Schreurs, A. J. M.; Tkacova, Ruzena; Bao, Weibin;

Jack, Damon; Higgins, Mark

CORPORATE SOURCE: Insaf Respiratory Research Institute, Wiesbaden,

D-65187, Germany

SOURCE: Pulmonary Pharmacology & Therapeutics (2007), 20(6),

740-749

CODEN: PPTHFJ; ISSN: 1094-5539

PUBLISHER: Elsevier Ltd.
DOCUMENT TYPE: Journal

LANGUAGE: English

In patients with chronic obstructive pulmonary disease (COPD) classified as moderate onwards, Global Initiative for Chronic Obstructive Lung Disease (GOLD) Guidelines recommend regular treatment with one or more long-acting bronchodilators, such as \$2-agonists or anticholinergics. In contrast to currently available long-acting 82-agonists, which have a duration of action of 12 h. indacaterol has demonstrated effective 24-h bronchodilation on once-daily dosing. A double-blind, randomized, placebo-controlled study was conducted to compare the safety, tolerability and efficacy of indacaterol with that of placebo, over a 28-day period, in patients with moderate COPD (as defined by GOLD 2001 criteria; equivalent to moderate-to-severe COPD in the GOLD 2005 criteria). Patients were randomized 2:2:1 to receive indacaterol 400 µg or 800 µg or placebo once-daily (between 07:00 and 11:00 h) via a single-dose dry-powder inhaler for 28 days. Assessments included monitoring of adverse events (AEs), blood chemical (including serum potassium and blood glucose), vital signs (blood pressure and heart rate), electrocardiograms and spirometry. One hundred and sixty-three patients were randomized, with 155 (95%) completing the study. There were no statistically significant differences between treatment groups in the overall incidence of AEs, with AEs reported by 35%, 51% and 25% of patients in the indacaterol 400 µg, 800 μg and placebo groups, resp. The majority of AEs were mild or moderate in severity, and there were no study-drug related serious AEs. There were no statistically significant differences between indacaterol groups and

placebo in mean pulse rate and QTc interval, and isolated statistically significant (p < 0.05) treatment-placebo differences in mean blood pressure, blood glucose and serum potassium. There was a statistically significant improvement in FEV1 vs. placebo at all post-baseline timepoints for both indacaterol treatment groups; 30 min post-dose, adjusted mean±SE FEV1 indacaterol-placebo differences were: Day 1, 220±36 mL and 210±36 mL; Dav 14, 320±50 mL and 270±50 mL; Dav 28, 260 ± 61 mL and 200 ± 61 mL for 400 and 800 μg , resp. (all p < 0.01 vs. placebo). Bronchodilation was still apparent after 24 h, with pre-dose (i.e. trough) adjusted mean±SE FEV1 indacaterol-placebo differences of: Day 14, 230±44 mL and 210±44 mL; Day 28, 220±49 mL and 210±49 mL for indacaterol 400 and 800 μg , resp. (all p < 0.0001 vs. placebo). Once-daily indacaterol was well tolerated at doses up to 800 µg with a good overall safety profile. There was no statistical difference at any dose between the safety of indacaterol and placebo. Furthermore, this study supports the previously demonstrated 24-h bronchodilator efficacy of indacaterol.1.

312753-06-3, Indacaterol

RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (safety, tolerability and efficacy of indacaterol, a novel once-daily 82-agonist, in patients with chronic obstructive pulmonary disease)

312753-06-3 CA RN

CN 2(1H)-Quinolinone, 5-[(1R)-2-[(5,6-diethyl-2,3-dihydro-1H-inden-2v1)amino]-1-hvdroxvethv1]-8-hvdroxv- (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 36 OF 76 CA COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 147:392432 CA

TITLE: Aerosol formulation comprising biocompatible polymer Capecchi, John; Stefely, James; Riley, Trevor Glaxo Group Limited, UK; 3M Innovative Properties INVENTOR(S):

PATENT ASSIGNEE(S): Company; Glaxo Wellcome Manufacturing Pte Ltd.

SOURCE: PCT Int. Appl., 47 pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

		TENT										LICAT					ATE	
	WO	2007	1096	98		A2		2007	0927			2007-						
	WO	2007	1096	98		A3		2008	1218									
		W:	AE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB	, BG,	BH,	BR,	BW,	BY,	BZ,	CA,
			CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM	, DZ,	EC,	EE,	EG,	ES,	FI,	GB,
			GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID	, IL,	IN,	IS,	JP,	KE.	KG,	KM,
			KN.	KP.	KR.	KZ.	LA.	LC.	LK.	LR.	LS	LT.	LU.	LY.	MA.	MD.	MG.	MK.
		RS, RU, TZ, UA, RW: AT, BE, IS, IT, BJ, CF, GH, GM,																
													,		,			
		RW:	AT.	BE.	BG.	CH.	CY.	CZ.	DE.	DK.	EE	ES.	FI.	FR.	GB,	GR.	HU.	IE.
			GH.	GM.	KE.	LS.	MW.	MZ.	NA.	SD.	SL	. SZ.	TZ.	UG.	ZM.	ZW.	AM.	AZ,
			BY.	KG.	KZ.	MD.	RU.	TJ.	TM.	AP.	EA	EP.	OA					
	AU	2007										2007-		99		2	0070	321
	CA	2646	236			A1						2007-						
	EP	2012	797			A2		2009	0114		EP :	2007-	7589	63		2	0070	321
		R:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE	, ES,	FI,	FR.	GB,	GR,	HU,	IE,
			AL,	BA,	HR,	MK,	RS											
	IN	2008	KN03	473		A		2009	0220		IN:	2008-	KN34	73		2	0800	826
	NO	2008	0037	60		A		2008	1217		NO :	2008-	3760			2	0080	901
	MX	2008	0119	67		A		2009	0114		MX :	2008-	1196	7		2	0080	919
	CN	1014	1542	8		A		2009	0422		CN :	2007-	8000	9835		2	0080	919
											KR :	2008-	7258	25		2	0081	022
PRIO	W: AE, AV, CH, CC, CC, CC, CC, CC, CC, CC, CC, CC										US :	2006-	7846	34P	1	P 2	0060	322
												2007-					0070	
7.70	mi.						- 2 - 4			3				- 3		- 3		

- AB The present invention relates to novel pharmaceutical aerosol formulations, processes for their preparation, their use in therapy, metered dose inhalers containing said formulations and the use of biocompatible polymers in reducing the variability in the content uniformity and/or in providing enhanced fine particle fraction (FFP) in said formulations.
 - T 312753-06-3, Indacaterol
 - RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (aerosol formulation comprising biocompatible polymer)
- RN 312753-06-3 CA
- CN 2(1H)-Quinolinone, 5-[(1R)-2-[(5,6-diethyl-2,3-dihydro-1H-inden-2-yl)amino]-1-hydroxyethyl]-8-hydroxy- (CA INDEX NAME)

Absolute stereochemistry.

L8 ANSWER 37 OF 76 CA COPYRIGHT 2009 ACS on STN 147:315055 CA

ACCESSION NUMBER:

TITLE: Compounds and methods of treating disorders associated

with activation of metachromatic cells

Maghni, Karim; Ouaked, Nadia; Lefort, Bertrand; INVENTOR(S):

Favret, Sandra

PATENT ASSIGNEE(S): Valorisation Recherche HSCM, Limited Partnership, Can. SOURCE: PCT Int. Appl., 100pp.

CODEN: PIXXD2 DOCUMENT TYPE: Patent

LANGUAGE:

English FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	TENT				KIN		DATE				ICAT					ATE	
	2007															0070:	
WO	2007	0967	82		A3		2009	0205									
							AU,		BA,	BB,	BG.	BR.	BW.	BY,	BZ.	CA,	CH.
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KM,	KN,
		KP,	KR,	KZ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,
		MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,
		RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	ΤJ,	TM,	TN,	TR,	TT,
		TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	zw						
	RW:						CZ,										
		IS,	IT,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,
							GN,										
							NA,					UG,	ZM,	ZW,	ΑM,	ΑZ,	BY,
							TM,										
	2643						2007										
EP	1996																
	R:						CZ,										
						LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	AL,
			HR,		RS												
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										WU Z	007-	твте.	< 1		n Z	0070	444

AΒ The present invention relates to neurokinin- 1 (NK-1) receptor antagonists in combination with an inhibitor of metachromatic cell (i.e., mast cells and basophils) activation, such as an anti-inflammatory agent, an

immunosuppressor, or a kinase inhibitor, and use of such combinations in the treatment of disorders associated with activation of metachromatic cells. Disorders associated with the activation of metachromatic cells include

allergic/non-allergic rhinitis, allergic/non-allergic asthma,

allergic/non-allergic urticaria, immuno-inflammatory disorders,

metachromatic cell-related autoimmune disorders, transplant rejection, and other metachromatic cell-related disorders.

312753-06-3, Indacaterol

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(treatment of disorders associated with activation of metachromatic cells using neurokinin 1 receptor antagonists in combination with inhibitors of metachromatic cell activation)

312753-06-3 CA RN

CM 2(1H)-Quinolinone, 5-[(1R)-2-[(5,6-diethyl-2,3-dihydro-1H-inden-2yl)amino]-1-hydroxyethyl]-8-hydroxy- (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 38 OF 76 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 147:173628 CA

TITLE:

Preparation of an inhalable dry powder formulation INVENTOR(S): Eber, Marcus; Kieckbusch, Thomas; Kaerger, Sebastian

Novartis AG, Switz. PATENT ASSIGNEE(S): SOURCE:

Brit. UK Pat. Appl., 9pp.

CODEN: BAXXDU

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 2434098	A	20070718	GB 2005-26446	20051223
PRIORITY APPLN. INFO.:			GB 2005-26446	20051223

A process for preparing dry powder formulations for inhalation comprises mixing one or more active pharmaceutical ingredients (e.g., indacaterol maleate) with one or more ternary agents (e.g., Mg or Ca stearate) and then admixing carrier particles (e.g. lactose).

753498-25-8

RL: PEP (Physical, engineering or chemical process); TEM (Technical or

engineered material use); THU (Therapeutic use); BIOL (Biological study);
PROC (Process); USES (Uses)

(inhalable dry powder formulation preparation)

RN 753498-25-8 CA

CN 2(1H)-Quinolinone, 5-[(1R)-2-[(5,6-diethyl-2,3-dihydro-1H-inden-2-yl)amino]-1-hydroxyethyl]-8-hydroxy-, (2Z)-2-butenedioate (1:1) (CA INDEX NAME)

CM 1

CRN 312753-06-3 CMF C24 H28 N2 O3

Absolute stereochemistry.

CM 2

CRN 110-16-7 CMF C4 H4 O4

Double bond geometry as shown.



REFERENCE COUNT:

2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 39 OF 76 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 147:133794 CA

TITLE: Indacaterol, a novel inhaled $\beta 2$ -agonist provides sustained 24-h bronchodilation in asthma

AUTHOR(S): Beeh, K. M.; Derom, E.; Kanniess, F.; Cameron, R.; Higgins, M.; van As, A.

CORPORATE SOURCE: Insaf Respiratory Research Institute, Wiesbaden, Germany

SOURCE: European Respiratory Journal (2007), 29(5), 871-878

CODEN: ERJOEI; ISSN: 0903-1936

PUBLISHER: European Respiratory Society
DOCUMENT TYPE: Journal

LANGUAGE: English

AB The present study examined the bronchodilator and safety profiles of single-dose indacaterol in intermittent or persistent asthma. In the present double-blind crossover study, 42 patients were randomized to receive single doses of indacaterol (50, 100, 200 and 400 μg) or placebo via a hydrofluoroalkane pressurized metered-dose inhaler. The primary efficacy comparisons were the per cent changes in forced expiratory volume in one second (FEV1) between indacaterol and placebo 30 min and 21 h post-dose. All doses resulted in prolonged bronchodilation, with indacaterol 200 and 400 µg meeting pre-specified efficacy criteria. The mean percentage increases in FEV1 from placebo with indacaterol 200 and 400 µg were 7.6 and 14.9%, resp., at 30 min, and 7.5 and 10.4%, resp., at 21 h post-dose. At these doses, changes in mean FEV1 relative to placebo were statistically significant from 5 min to 25 h, inclusive. At 5 min, the geometric least squares mean values for FEV1 were 3.08 and 3.22 L for the 200 and 400 µg doses, resp., compared with 2.99 L for placebo. At 24 h after dosing, the baseline-adjusted geometric least square mean FEV1 was 3.13, 3.11, 3.24 and 3.30 L for indacaterol 50, 100, 200 and 400 ug, resp., and 2.98 L for placebo. All treatments were well tolerated. Once-daily indacaterol at doses of 200 and 400 ug provided sustained 24-h bronchodilation, with a rapid onset and a good tolerability and safety profile.

IT 312753-06-3, Indacaterol

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(bronchodilator and safety profiles single-dose indacaterol in treatment of intermittent and persistent asthma)

RN 312753-06-3 CA

CN 2(1H)-Quinolinone, 5-[(1R)-2-[(5,6-diethyl-2,3-dihydro-1H-inden-2-yl)aminol-1-hydroxyethyl]-8-hydroxy- (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 40 OF 76 CA COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 147:132518 CA

TITLE: Ultra-long-a

Ultra-long-acting $\beta 2$ -adrenoceptor agonists: an emerging therapeutic option for asthma and COPD?

10/552.023

Matera, Maria Gabriella; Cazzola, Mario AUTHOR(S):

CORPORATE SOURCE: Department of Experimental Medicine, Unit of

Pharmacology, The Second University of Naples, Naples, Italy

SOURCE: Drugs (2007), 67(4), 503-515 CODEN: DRUGAY; ISSN: 0012-6667

PUBLISHER: Wolters Kluwer Health

DOCUMENT TYPE: Journal: General Review

LANGUAGE: Enalish

A review. There has been a real interest recently in developing

once-daily \$2-adrenoceptor agonists (ultra-long-acting

β2-adrenoceptor agonists [ultra-LABAs]) for treating asthma and chronic obstructive pulmonary disease (COPD) in an attempt to simplify their management, although an increasing amount of convincing data show an association of LABAs with a rise in asthma-related deaths and life-threatening experiences. This paper reviews the effects of different ultra-LABAs that are at varying stages of development. Arformoterol, carmoterol, indacaterol and GSK-159797 are ultra-LABAs that are likely to be

introduced into the market before 2010. It is plausible that once-daily dose administration of an LABA will lead to increased convenience for patients, which may also lead to enhancement of adherence, and may have advantages leading to improved overall clin. outcomes in patients with

asthma and COPD.

312753-06-3, Indacaterol RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(ultra-long-acting indacaterol may lead to increased convenience, enhanced adherence and improve clin. outcome in patient with asthma and chronic obstructive pulmonary disease)

312753-06-3 CA RN

2(1H)-Quinolinone, 5-[(1R)-2-[(5,6-diethyl-2,3-dihydro-1H-inden-2-CN v1)amino]-1-hvdroxvethv1]-8-hvdroxv- (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

THERE ARE 71 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

71 ANSWER 41 OF 76 CA COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 147:125812 CA

TITLE: Novel combination of anticholinergics, β2-adrenoceptor agonists, antileukotrienes (leukotriene receptor antagonists), glucocorticoids

and/or PDE 4 inhibitors for the treatment of

inflammatory diseases

INVENTOR(S): Maus, Joachim; Kastrup, Horst; Bauhofer, Artur; Cnota, Peter; Szelenyi, Istvan

PATENT ASSIGNEE(S): Meda Pharma Gmbh & Co KG, Germany

SOURCE: PCT Int. Appl., 39pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

							DATE					ATIO					ATE	
WO	GM, KE KG, K2 AU 2006329042 CA 2632780				A2		2007	0628									0061	201
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB	, в	G, B	R,	BW,	BY,	BZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ	, E	C, E	Ε,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL	, I	N, I	s,	JP,	KE,	KG,	KM,	KN,
		KP,	KR,	KZ,	LA,	LC,	LK,	LR,	LS,	LT	, L	U, L	v,	LY,	MA,	MD,	MG,	MK,
		MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NI,	NO	, N	Z, 0	м,	PG,	PH,	PL,	PT,	RO,
		RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM	, S	V, S	Υ,	TJ,	TM,	TN,	TR,	TT,
		TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM	, Z	ñ						
	RW:	ΑT,	ΒE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE	, E	S, F	I,	FR,	GB,	GR,	HU,	ΙE,
		IS,	IT,	LT,	LU,	LV,	MC,	NL,	PL,	PT	, R	o, s	Ε,	SI,	SK,	TR,	BF,	ВJ,
		GM,	KE,	LS,	MW,	ΜZ,	NA,	SD,	SL,	SZ	, T	z, U	Э,	ZM,	ZW,	AM,	ΑZ,	BY,
							2007											
EP	CF, CG, GM, KE, KG, KZ, AU 2006329042 CA 2632780 EP 1971369																	
	R:																	
							2009											
	2007						2007											
IN	2008	KN01	510		A		2009											
	1013																	
	2008																	
	2008				A		2008	0911									0800	
PRIORIT	Y APP	LN.	TNF.O	. :													0051	
										WO	200	6-EP	115	36		w 2	0061	201

AB The invention relates to novel combinations based on anticholinergics, β2-adrenoceptor agonists, PDE 4 inhibitors, glucocorticoids, and leukotriene-receptor antagonists, process for their production and their use for the treatment of inflammatory diseases, preferably respiratory diseases as bronchial asthma and chronic obstructive pulmonary diseases or rheumatic or autoimmune diseases. Thus, 3-in-1 combination (budesonide, rolipram and R,R-glycopyrrolate) resulted in statistically significant over-additive inhibition of the TNFα release.

IT 312753-06-3, Indacaterol

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(combination of anticholinergics and β2-adrenoceptor agonists and antileukotrienes and glucocorticoids for treatment of inflammatory diseases)

RN 312753-06-3 CA

CN 2(1H)-Quinolinone, 5-[(1R)-2-[(5,6-diethyl-2,3-dihydro-1H-inden-2yl)amino]-1-hydroxyethyl]-8-hydroxy- (CA INDEX NAME)

Absolute stereochemistry.

L8 ANSWER 42 OF 76 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 147:16522 CA

TITLE: Combination of β2-adrenoceptor agonist,

glycopyrrolate and antiinflammatory corticosteroid for

therapy of inflammatory or obstructive airways diseases

INVENTOR(S): Collingwood, Stephen Paul; Haeberlin, Barbara

PATENT ASSIGNEE(S): Novartis AG, Switz.; Novartis Pharma GmbH

SOURCE: PCT Int. Appl., 34pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

	TENT				KIN	D	DATE				ICAT				D	ATE	
WO	2007	0572	21				2007								2	0061	120
wo	2007 W:	AE, CN, GE, KP, MN, RS,	AG, CO, GH, KR, MW, RU,	AL, CR, GM, KZ, MX, SC,	AM, CU, GT, LA, MY, SD,	AT, CZ, HN, LC, MZ, SE,	AU, DE, HR, LK, NA, SG, VC,	AZ, DK, HU, LR, NG, SK,	DM, ID, LS, NI, SL,	DZ, IL, LT, NO, SM,	EC, IN, LU, NZ, SV,	EE, IS, LV, OM,	EG, JP, LY, PG,	ES, KE, MA, PH,	FI, KG, MD, PL,	GB, KM, MG, PT,	GD, KN, MK, RO,
	RW:	AT, IS, CF, GM,	BE, IT, CG, KE,	BG, LT, CI, LS,	CH, LU, CM, MW,	CY, LV, GA, MZ,	CZ, MC, GN, NA,	DE, NL, GQ, SD,	DK, PL, GW, SL,	EE, PT, ML, SZ,	ES, RO, MR, TZ,	SE, NE,	SI, SN,	SK, TD,	TR, TG,	BF, BW,	BJ, GH,
CA	2006 2628 1965 R:	3147 170 792 AT,	22 BE,	BG,	A1 A1 A2 CH,	CY,	2007 2007	0524 0524 0910 DE,	DK,	AU 2 CA 2 EP 2 EE,	006- 006- 006- ES,	2628 8186 FI,	170 78 FR,	GB,	2 GR,	0061 0061 HU,	120 120

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JP 2009516661	T	20090423	JP	2008-540531		20061120
IN 2008DN04132	A	20080801		2008-DN4132		20080514
CN 101309683	A	20081119	CN	2006-80042891		20080516
MX 2008006500	A	20080528	MX	2008-6500		20080520
KR 2008069197	A	20080725	KR	2008-711997		20080520
US 20080286363	A1	20081120	US	2008-94373		20080520
PRIORITY APPLN. INFO.:			GB	2005-23656	A	20051121
			WO	2006-EP11113	W	20061120
OTHER SOURCE(S):	CASRE	ACT 147:16522	; M	ARPAT 147:16522		

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

A medicament comprising, sep. or together, (A) a compound of formula (I; R1 = H, OH, C1-10-alkoxy; R2, R3 = H, C1-10-alkyl; R4-7 = H, halogen, cyano, OH, C1-10-alkoxy, C6-10-arvl, C1-10-alkyl, substituted C1-10-alkyl, C2-10-alkenvl, trialkylsilvl, carboxy, C1-10-alkoxycarbonvl, amido; R4-R5, R5-R6 or R6-R7 together with carbon atoms to which they are attached denote carbocyclic or heterocyclic ring; Rx, Rv = CH2 or (CH2)2; W = II; R8-10 = H, C1-4-alkyl) in free, salt or solvate form, (B) a glycopyrronium salt, and (C) a compound of formula (III; T = monovalent cyclic organic group having 3-15 atoms in the ring system); for simultaneous, sequential or sep. administration in the treatment of an inflammatory or obstructive airways disease is proposed. The proposed medicament may further comprise another drug substance which is an antiinflammatory, a bronchodilator, an antihistamine, a decongestant or an antitussive drug substance. The medicament is in inhalable form, as an aerosol or a dry powder. Medicaments of the invention are advantageous in the treatment, symptomatic or prophylactic, of inflammatory or obstructive airways disease, exhibiting highly effective bronchodilatory and antiinflammatory properties. Thus, gelatin capsules suitable for use in a capsule inhaler were prepared by mixing dry powders of (R)-5-[2-(5,6-diethylindan-2-ylamino)-1-hydroxyethyl]-8-hydroxy-1Hquinolin-2-one maleate (preparation given) 20 parts, 3-[(Cyclopentylhydroxyphenylacetyl)oxy]-1,1-dimethylpyrrolidinium bromide 50 parts, 3-methylthiophene-2-carboxylic acid (6S, 9R, 10S, 1S, 13S, 16R, 17R) -9-chloro-6-fluoro-11-hvdroxy-17-methoxycarbonyl-10,13,16-trimethy1-3-oxo-6,7,8,9,10,11,12,13,14,15,16,17-dodecahydro-3Hcyclopenta[a]phenanthren-17-yl ester 50 parts, and lactose monohydrate 19880 parts. 753498-25-8P RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological

study); PREP (Preparation); USES (Uses)

(combination of $\beta2$ -adrenoceptor agonist, glycopyrrolate and antiinflammatory corticosteroid for therapy of inflammatory or obstructive airways diseases)

RN 753498-25-8 CA CN

2(1H)-Ouinolinone, 5-[(1R)-2-[(5,6-diethyl-2,3-dihydro-1H-inden-2yl)amino]-1-hydroxyethyl]-8-hydroxy-, (2Z)-2-butenedioate (1:1) (CA INDEX NAME)

CM 1

CRN 312753-06-3

CMF C24 H28 N2 O3

Absolute stereochemistry.

CM 2

CRN 110-16-7 CMF C4 H4 O4

Double bond geometry as shown.

L8 ANSWER 43 OF 76 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 146:514776 CA

TITLE: Treatment of asthma and COPD using triple-combination therapy

INVENTOR(S):

Collingwood, Stephen Paul; Haeberlin, Barbara PATENT ASSIGNEE(S): Novartis AG, Switz.; Novartis Pharma GmbH

SOURCE: PCT Int. Appl., 32pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	ENT	NO.			KIN	D	DATE			APPL	ICAT	ION	NO.		D	ATE	
						-											
WO	2007	0572	19		A1		2007	0524	1	WO 2	006-1	EP11	108		2	0061	120
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		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KM,	KN,
		KP,	KR,	KZ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,
		MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,
		RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	TJ,	TM,	TN,	TR,	TT,
		TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW						

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RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
             CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
             GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM
     AU 2006314720
                          A1
                                20070524
                                            AU 2006-314720
                                                                    20061120
                                            CA 2006-2628321
     CA 2628321
                          A1
                                20070524
                                                                    20061120
                                            EP 2006-818673
     EP 1957072
                          A1
                                20080820
                                                                    20061120
         R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR
     JP 2009516660
                          Т
                                20090423
                                            JP 2008-540530
                                                                    20061120
     IN 2008DN02984
                          Α
                                20080808
                                            IN 2008-DN2984
                                                                    20080410
     US 20080279948
                          A1
                                20081113
                                            US 2008-93663
                                                                    20080514
     MX 2008006501
                                20080528
                                            MX 2008-6501
                                                                    20080520
                          Α
     KR 2008068085
                                20080722
                                            KR 2008-711991
                                                                    20080520
                          Α
     CN 101312729
                                            CN 2006-80043314
                          Α
                                20081126
                                                                    20080520
PRIORITY APPLN. INFO.:
                                            GB 2005-23655
                                                                A 20051121
                                            WO 2006-EP11108
                                                                W 20061120
OTHER SOURCE(S):
                       MARPAT 146:514776
GI
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AB A medicament comprising, sep. or together (A) a compound with $\beta 2$ -agonist activity such as $(R)-5-[2-(5,6-\operatorname{diethylindan-}2-\operatorname{ylamino})-1-\operatorname{hydroxyethyl}]-8-\operatorname{hydroxy-lH-quinolin-}2-\operatorname{one}$ maleate (1 maleate), (B) a glycopyrronium salt (which are antimuscarinic agents), and (C) mometasone furcate (an anti-inflammatory corticosteroid) for simultaneous, sequential or sep. administration in the treatment of an obstructive airways disease. II 312753-16-5

Ι

- RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 - (treatment of obstructive airway disease using triple-combination therapy with β2 adrenergic agonist and glycopyrronium salt and mometasone furoate and other agents)
- RN 312753-16-5 CA
- CN 2(1H)-Quinolinone, 5-[2-[(2,3-dihydro-1H-inden-2-yl)amino]-1-hydroxyethyl]-8-hydroxy- (CA INDEX NAME)

REFERENCE COUNT:

Я

THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 44 OF 76 CA COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 146:475297 CA

TITLE:

Effect of indacaterol, a novel long-acting B2-agonist, on isolated human bronchi

Naline, E.; Trifilieff, A.; Fairhurst, R. A.; AUTHOR(S): Advenier, C.: Molimard, M.

Research Unit EA220, Faculty of Medicine, Hospital CORPORATE SOURCE: Foch, Versailles University, Suresnes, Fr.

European Respiratory Journal (2007), 29(3), 575-581 SOURCE:

CODEN: ERJOEI; ISSN: 0903-1936 PUBLISHER: European Respiratory Society

Journal DOCUMENT TYPE:

LANGUAGE: English

Indacaterol is a novel β 2-adrenoceptor agonist in development for the once-daily treatment of asthma and chronic obstructive pulmonary disease. The present study evaluated the relaxant effect of indacaterol on isolated human bronchi obtained from lungs of patients undergoing surgery for lung carcinoma. Potency (-logEC50), maximal relaxant effect (Emax) and onset of action were determined at resting tone. Duration of action was determined against cholinergic neural contraction induced by elec. field stimulation (EFS). At resting tone, -logEC50 and Emax values were 8.82 ± 0.41 and 77 \pm 5% for indacaterol, 9.84 \pm 0.22 and 94 \pm 1% for formoterol, 8.36 ± 0.16 and $74 \pm 4\%$ for salmeterol, and 8.43 ± 0.22 and 84± 4% for salbutamol, resp. In contrast to salmeterol, indacaterol did not antagonize the isoprenaline response. Indacaterol's onset of action (7.8 ± 0.7 min) was not significantly different from that of formoterol $(5.8 \pm 0.7 \text{ min})$ or salbutamol $(11.0 \pm 4.0 \text{ min})$, but it was significantly faster than that of salmeterol (19.4 ± 4.3 min). EFS-induced contractions were inhibited with -logIC50 values of 6.96 ± 0.13 (indacaterol), 8.96 ± 0.18 (formoterol), 7.18 ± 0.34 (salmeterol) and 6.39 ± 0.26 (salbutamol). Duration of action was >12 h for indacaterol and salmeterol, and 35.3 \pm 8.8 and 14.6 \pm 3.7 min for formoterol and salbutamol, resp. In isolated human bronchi, indacaterol behaved as a long-acting 62-adrenoceptor agonist with high intrinsic efficacy and fast onset of action. 312753-06-3, Indacaterol

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(indacaterol showed long-acting \$2-adrenoceptor agonist activity with high intrinsic efficacy and fast onset of action like formoterol or salbutamol and faster than salmeterol in bronchi isolated from lung carcinoma patient)

312753-06-3 CA RN

2(1H)-Quinolinone, 5-[(1R)-2-[(5,6-diethyl-2,3-dihydro-1H-inden-2-CN yl)amino]-1-hydroxyethyl]-8-hydroxy- (CA INDEX NAME)

Absolute stereochemistry.

27 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 45 OF 76 CA COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 146:462251 CA

TITLE:

Preparation of indazolyl-substituted sulfonamides and analogs as glucocorticoid receptor modulators in the

THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS

treatment of inflammatory diseases INVENTOR(S): Bladh, Haakan; Dahmen, Jan; Hansson, Thomas;

Henriksson, Krister; Lepistoe, Matti; Nilsson,

Stinabritt

PATENT ASSIGNEE(S): Astrazeneca AB, Swed.; Schering A.-G.

SOURCE: PCT Int. Appl., 91pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

REFERENCE COUNT:

PAT	ENT	NO.			KIN	D	DATE			APPL	ICAT:	ION I	NO.		D	ATE	
						_									-		
WO	2007	0467	47		A1		2007	0426	1	WO 2	006-	SE11	81		2	0061	018
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
		CN,	co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,	KM,	KN,
		KP,	KR,	KZ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,
	KP, KR, K MN, MW, M			MX,	MY,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,
	MN, MW, I RS, RU, 1			SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	ΤJ,	TM,	TN,	TR,	TT,
		TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW						
	RW:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	IE,
		IS,	IT,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	BJ,
		CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	TG,	BW,	GH,
		GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,
		KG,	ΚZ,	MD,	RU,	ΤJ,	TM										
CA	TZ, UA, RW: AT, BE, IS, IT, CF, CG, GM, KE, KG, KZ, A 2628577				A1		2007	0426		CA 21	006-	2628	577		2	0061	018

OTHER SOURCE(S): MARPAT 146:462251

$$\begin{bmatrix} 0 & R^2 & R^4 & T \\ 0 & R^3 & X & N & N \\ R^1 & R^3 & Q^1 & Q^2 & Y \end{bmatrix}$$

AB Title compds. represented by the formula I [wherein A = Ph, naphthyl, pyridinyl, etc.; Rl = H; R2 = H, (halo)alkyl or cyclo(halo)alkyl; R3 = H or (halo)alkyl; R3 = H or alkyl; R4 = H, halo or (halo)alkyl; T = CH or N; Q1, Q2 = independently CY' or N; Y, Y' = H, halo, alkyl, etc.; W = Ph, cycloalkyl, thienyl, isoxazolyl, etc.; X = CH2, S, NH, etc.; and pharmaceutically acceptable salts thereof) were prepared as glucocorticoid receptor modulators. For example, II was provided in a multi-step synthesis starting from reaction of L-alaninol with

II

- 2,4,6-trimethylbenzenesulfonyl chloride. II was tested in human glucocorticoid receptor assay with an IC50 value of 2.9 nM. Thus, I and their pharmaceutical compns. are useful in treatment of a glucocorticoid receptor mediated disease state.
- IT 312753-06-3, Indacaterol
 - RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (combination therapy agent; preparation of indazolyl-substituted sulfonamides and analogs as glucocorticoid receptor modulators in treatment of inflammatory diseases)
- RN 312753-06-3 CA
- N 2(1H)-Quinolinone, 5-[(1R)-2-[(5,6-diethyl-2,3-dihydro-1H-inden-2-yl)amino]-1-hydroxyethyl]-8-hydroxy- (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 46 OF 76 CA COPYRIGHT 2009 ACS on STN 146:302287 CA

ACCESSION NUMBER:

TITLE:

Combination of compounds, which can be used in the treatment of respiratory diseases, especially chronic obstructive pulmonary disease (COPD) and asthma

INVENTOR(S): Eriksson, Tomas; Hansson, Johan Astrazeneca AB, Swed.

Patent

English

PCT Int. Appl., 53pp. CODEN: PIXXD2

PATENT ASSIGNEE(S):

SOURCE:

DOCUMENT TYPE:

LANGUAGE:

PATENT INFORMATION

FAMILY ACC. NUM. COUNT:

I TK	INFOR	MATI	ON:														
PAT	PATENT NO. F			KIN	KIND DATE				APPLICATION NO.						DATE		
WO	2007024182			A1 20070301			WO 2006-SE970										
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FΙ,	GB,	GD,
		GE,	GH,	GM,	HN,	HR,	ΗU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KM,	KN,	KP,
		KR,	ΚZ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,	MN,
							NG,										
		RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	TJ,	TM,	TN,	TR,	TT,	TZ,
							VN,										
	RW:	ΑT,															
		IS,	IT,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	BJ,
							GN,										
		GM,	KΕ,	LS,	MW,	ΜZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,
			KZ,														
	2006																
CA	2620	847			A1		2007	0301		CA 2	006-	2620	847		2	0060	824
EP	1922	074			A1		2008	0521		EP 2	006-	7696	26		2	0060	824
	R:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	IE,
		IS,	IT,	LI,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	AL,
		BA,	HR,	MK,	RS												
JP	2009	5060	28		T		2009	0212		JP 2	-800	5278	74		2	0060	824
MX	2008	0023	21		A		2008	0314		MX 2	-800	2321			2	0080	218
KR	2008	0383	61		A		2008	0506		KR 2	008-	7045	12		2	0080	225

IN 2008DN01805	A	20090320	IN	2008-DN1805		20080229
NO 2008001480	A	20080516	NO	2008-1480		20080326
CN 101296701	A	20081029	CN	2006-80040238		20080428
PRIORITY APPLN. INFO.:			SE	2005-1896	A	20050826
			SE	2006-1220	A	20060601
			WO	2006-SE970	W	20060824

OTHER SOURCE(S): MARPAT 146:302287 GI

$$(\mathbb{R}^1)_{\mathfrak{m}} \xrightarrow{\mathsf{N}} \mathbb{R}^2 \xrightarrow{\mathsf{OH}} \mathbb{R}^4$$

AB The present invention provides pharmaceutical compns. comprising a glucocorticosteroid and a compound of formula (I): wherein m is 0, 1 or 2; each R1 independently represents halogen or cyano; R2 represents a hydrogen atom or methyl; R3 represents the group C1-C4 alkyl; and R4 represents hydrogen or halogen; or a pharmaceutically acceptable salt thereof.

Т

- IT 312753-06-3, Indacaterol
 - RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 - (combination of compds., which can be used in the treatment of respiratory diseases, especially COPD and asthma)
- RN 312753-06-3 CA
- CN 2(1H)-Quinolinone, 5-[(1R)-2-[(5,6-diethyl-2,3-dihydro-1H-inden-2yl)amino]-1-hydroxyethyl]-8-hydroxy- (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 47 OF 76 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 146:266794 CA

TITLE: A combination of compounds, which can be used in the treatment of respiratory diseases, especially chronic obstructive pulmonary disease (COPD) and asthma

INVENTOR(S): Eriksson, Tomas; Hansson, Johan

PATENT ASSIGNEE(S): Astrazeneca AB, Swed. SOURCE: PCT Int. Appl., 44pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent

DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

PA							KIND DATE			APPLICATION NO.									
WO 2007024183							WO 2006-SE971												
	W:										, BG,								
											, EC,								
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		KR,	ΚZ,	LA,	LC,	LK,	LR,	LS,	LT,	LU	, LV,	LY,	MA,	MD,	MG,	MK,	MN,		
											, OM,								
		RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV	, SY,	ΤJ,	TM,	TN,	TR,	TT,	TZ,		
		UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW									
	RW:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE	, ES,	FI,	FR,	GB,	GR,	HU,	IE,		
		IS,	IT,	LT,	LU,	LV,	MC,	NL,	PL,	PT	, RO,	SE,	SI,	SK,	TR,	BF,	ВJ,		
		CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML	, MR,	NE,	SN,	TD,	TG,	BW,	GH,		
		GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ	, TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,		
					RU,														
AU	2006	2821	22		A1					AU 2006-282122					2	0060	B24		
CA	2620	281			A1		2007	0301		CA :	2006-	2620	281		2	0060	B24		
EP	1922	070			A1	A1 20080521				EP 2006-769627					20060824				
	R:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE	, ES,	FΙ,	FR,	GB,	GR,	HU,	IE,		
											, PT,								
									JP 2008-527875					20060824					
	2008								MX 2008-2320										
KR	2008	0381	78		A		2008	0502	KR 2008-704511					20080225					
	IN 2008DN01804										2008-								
											2008-								
CN	1012	9669	8		A		2008	1029		CN :	2006-	8004	0270		2	0800	428		
PRIORIT	Y APP	LN.	INFO	. :						SE :	2005-	1895		A 20050826					
									SE :	2006-	1221		A 20060601						
						WO :	2006-	SE97	1	W 20060824									

OTHER SOURCE(S): MARPAT 146:266794

GI

$$(R^1)_{\mathfrak{m}} \xrightarrow{\mathsf{N}} \underset{\mathsf{H}}{\overset{\mathsf{O}}{\underset{\mathsf{R}^2}{\mathsf{OH}}}} \circ \underset{\mathsf{OH}}{\overset{\mathsf{O}}{\underset{\mathsf{R}^4}{\mathsf{OH}}}} \times R^4$$

AB The present invention provides pharmaceutical compns. comprising a β2-agonist, and a compound of formula (I): wherein m is 0, 1 or 2; each R1 independently represents halogen or cyano; R2 represents a hydrogen atom or methyl; R3 represents the group C1-C4 alkyl; and R4 represents hydrogen or halogen; or a pharmaceutically acceptable salt thereof.

IT 312753-06-3, Indacaterol

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(combination of compds., which can be used in treatment of respiratory diseases, especially COPD and asthma)

Ι

RN 312753-06-3 CA

2 (1H) -Quinolinone, 5-[(1R)-2-[(5,6-diethyl-2,3-dihydro-1H-inden-2-yl)aminol-1-hydroxyethyl]-8-hydroxy- (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 48 OF 76 CA COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 146:142674 CA TITLE: Preparation of pyridopyrim

INVENTOR(S):
PATENT ASSIGNEE(S):
SOURCE:

146:142674 CA
Preparation of pyridopyrimidine derivatives as
phosphodiesterase-4 (PDE4) inhibitors for the
treatment of inflammatory and immune diseases
Lisius, Annea; Nikitidis, Grigorios; Sjoe, Peter
Astrazeneca AB, Swed.

PCT Int. Appl., 102pp. CODEN: PIXXD2 DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.				ICATION I					
WO 2007004958									
W: AE, AG, A	L, AM, AT	, AU, AZ,	BA, BB,	BG, BR,	BW, BY,	BZ, CA	CH,		
CN, CO, C	R. CU. CZ	DE, DK,	DM. DZ.	EC. EE.	EG. ES.	FI. GB	GD.		
		, HU, ID,							
		LR, LS,							
		, NI, NO,							
		, SL, SM,							
US, UZ, V			,	,	,	,			
RW: AT, BE, I			DK. EE.	ES. FI.	FR. GB.	GR. HU	TE.		
		MC, NL,							
		, GN, GQ,							
		, NA, SD,							
	D, RU, TJ		,,	,,		,	,		
EP 1922318			EP 2	006-7580	19	2006	1703		
R: AT, BE, I									
		J, LV, MC,					, 12,		
JP 2009500405							1703		
US 20080227797									
IN 2008DN00716									
CN 101258152									
PRIORITY APPLN. INFO.:		20000505		005-1564					
INIONIII ALIBN. INIO				006-516					
				006-SE82					
OTHER SOURCE(S):	MARPAT	146:1426		.000 0002	•	11 2000	0,00		

AB The title compds. I [A = N, CAl; E = N, CEl; T = CO, SO2; X = C, S; W = (CH2)n; Y = (CH2)p; n, p = 0 or 1; L = CH, N; when L is CH then J is Nh; when L is N then J is absent and T is bonded directly to L; Rl = (un) substituted aryl, heteroaryl; R2 = (un) substituted alkyl, (un) substituted the cycloalkyl, (un) substituted therocyclyl, etc.; Al, El, Gl = H, halo, cyano, etc.] or N-oxides thereof or pharmaceutically acceptable salts thereof are prepared Thus, N-(cis-4-[1-1,3, 4-difluorophenyl)-6-fluoro-2, 4-dioxo-1, 4-dihydropyrido[2,3-d]pyrimidin-3(2H)-yl]cyclohexyl)-2-hydroxy-5-(hydroxymethyl) benzamide was prepared in a multistep process starting from 2-chloro-5-fluoronicotinic acid and 3, 4-difluoroaniline. In an assay for inhibition of human PDE4B2, compds. of this invention showed LC50 values

Ι

of 0.4 nM to 432 nM.

IT 312753-06-3, Indacaterol

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL

(Biological study); USES (Uses)

(pharmaceutical combination; preparation of pyridopyrimidine derivs. as PDE4 inhibitors for treatment of inflammatory and immune diseases)

RN 312753-06-3 CA

CN 2(1H)-Quinolinone, 5-[(1R)-2-[(5,6-diethyl-2,3-dihydro-1H-inden-2-yl)amino]-1-hydroxyethyl]-8-hydroxy- (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 49 OF 76 CA COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 146:87582 CA

TITLE: MRP4 inhibitors for the treatment of respiratory

diseases

INVENTOR(S): Goeggel, Rolf; Cui, Yunhai

PATENT ASSIGNEE(S): Boehringer Ingelheim International GmbH, Germany;

Boehringer Ingelheim Pharma Gmbh & Co. KG

SOURCE: PCT Int. Appl., 63pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND DA	TE Z	APPLICATION NO.	DATE
WO 2006134022	A1 20	061221 V	TO 2006-EP62690	20060530
W: AE, AG, AL,	AM, AT, A	U, AZ, BA,	BB, BG, BR, BW,	BY, BZ, CA, CH,
CN, CO, CR,	CU, CZ, D	E, DK, DM,	DZ, EC, EE, EG,	ES, FI, GB, GD,
GE, GH, GM,	HR, HU, I	D, IL, IN,	IS, JP, KE, KG,	KM, KN, KP, KR,
KZ, LC, LK,	LR, LS, L'	T, LU, LV,	LY, MA, MD, MG,	MK, MN, MW, MX,
MZ, NA, NG,	NI, NO, N	Z, OM, PG,	PH, PL, PT, RO,	RU, SC, SD, SE,
SG, SK, SL,	SM, SY, To	J, TM, TN,	TR, TT, TZ, UA,	UG, US, UZ, VC,
VN, YU, ZA,	ZM, ZW			
RW: AT, BE, BG,	CH, CY, C	Z, DE, DK,	EE, ES, FI, FR,	GB, GR, HU, IE,
IS, IT, LT,	LU, LV, M	C, NL, PL,	PT, RO, SE, SI,	SK, TR, BF, BJ,
CF, CG, CI,	CM, GA, GI	N, GQ, GW,	ML, MR, NE, SN,	TD, TG, BW, GH,

GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,

KG, KZ, MD, RU, TJ, TM CA 2006-2611907 CA 2611907 A1 20061221 EP 1898894 A1 20080319 EP 2006-763346

20060530 R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,

THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS

inhibitors for the treatment of airway diseases

20060530

IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR JP 2008543806 T 20081204 JP 2008-516268 20060530 US 20060286041 A1 20061221 US 2006-424596 20060616 PRIORITY APPLN. INFO .: EP 2005-105363 A 20050617 WO 2006-EP62690 W 20060530

OTHER SOURCE(S): MARPAT 146:87582

The present invention relates to the use of MRP4 inhibitors for the treatment of respiratory diseases, pharmaceutical compns. containing them and processes for the preparation thereof.

312753-33-6, 5-[2-(5,6-Diethylindan-2-ylamino)-1-hydroxyethyl]-8hydroxy-1H-quinolin-2-one

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(betamimetic; MRP4 inhibitors in combination with other therapeutic agents for treatment of respiratory diseases)

RN 312753-33-6 CA

CN 2(1H)-Ouinolinone, 5-[2-[(5,6-diethyl-2,3-dihydro-1H-inden-2-yl)amino]-1hydroxyethyl]-8-hydroxy- (CA INDEX NAME)

19 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT L8 ANSWER 50 OF 76 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 146:50272 CA TITLE: Indacaterol derivatives and phosphodiesterase

Trifilieff, Alexandre INVENTOR (S):

PATENT ASSIGNEE(S): Novartis AG, Switz.; Novartis Pharma GmbH SOURCE: PCT Int. Appl., 31pp.

CODEN: PIXXD2 DOCUMENT TYPE: Patent. LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

REFERENCE COUNT:

PATENT NO. KIND DATE APPLICATION NO. WO 2006128675 A1 20061207 WO 2006-EP5154 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,

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GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR,
             KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX,
            MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE,
             SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC,
             VN, YU, ZA, ZM, ZW
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
             CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
             GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM
    AU 2006254318
                         A1
                                20061207
                                           AU 2006-254318
                                                                   20060530
     CA 2609522
                          A1
                                20061207
                                           CA 2006-2609522
                                                                   20060530
     EP 1890699
                          A1
                                20080227
                                           EP 2006-753987
                                                                   20060530
        R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR
                         Т
                                           JP 2008-514006
     JP 2008542319
                                20081127
                                                                   20060530
                                            IN 2007-DN8166
     IN 2007DN08166
                          Α
                                20080704
                                                                   20071022
     CN 101180058
                          Α
                                20080514
                                            CN 2006-80017568
                                                                   20071120
     US 20090041675
                                            US 2007-921189
                                                                   20071128
                          A1
     MX 2007015081
                          Α
                                20080117
                                            MX 2007-15081
                                                                   20071129
     KR 2008013960
                          Α
                                20080213
                                            KR 2007-727824
                                                                   20071129
                                            GB 2005-11066
PRIORITY APPLN. INFO.:
                                                                A 20050531
                                            WO 2006-EP5154
                                                                W 20060530
                        MARPAT 146:50272
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OTHER SOURCE(S):

A medicament comprising sep. or together, (A) a compound of formula (I) in free or salt or solvate form, where W, Rx, Ry, R1, R2, R3, R4, R5, R6 and R7 have the meanings as indicated in the specification, and (B) one or more of compds. selected from the group consisting of PDE4 inhibitors and PDE5 inhibitors, for simultaneous, sequential or sep. administration in the treatment of an inflammatory or obstructive airways disease.

312753-06-3

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(indacaterol derivs. and phosphodiesterase inhibitors for treatment of airway diseases)

RN 312753-06-3 CA CN

2(1H)-Quinolinone, 5-[(1R)-2-[(5,6-diethyl-2,3-dihydro-1H-inden-2v1)amino]-1-hvdroxvethv1]-8-hvdroxv- (CA INDEX NAME)

Absolute stereochemistry.

12

REFERENCE COUNT:

THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 51 OF 76 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 146:50270 CA

TITLE: Medicament containing organic compounds

PATENT ASSIGNEE(S): Novartis AG, Switz.; Novartis Pharma GmbH; Trifilieff,

Alexandre

SOURCE: PCT Int. Appl., 23pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATE	PATENT NO.						KIND DATE			APPLICATION NO.						DATE		
	WO 2006128674 WO 2006128674							WO 2006-EP5153						20060530				
		E, AG,						RΔ	BB	BG:	BR	ВW	BY	B7.	CA	CH		
		v, co,																
		E, GH,																
		LC,																
		Z. NA.																
	S	s, SK,	SL,	SM,	SY,	TJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,		
	V	v, YU,	ZA,	ZM,	ZW													
	RW: A'	Γ, BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,		
	13	3, IT,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	BJ,		
	C	F, CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG,	BW,	GH,		
	G1	1, KE,	LS,	MW,	ΜZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,		
		G, KZ,																
								AU 2006-254317										
								CA 2006-2608704										
								EP 2006-753986 DK, EE, ES, FI, FR, GB,										
																ΙE,		
		5, IT,																
								JP 2008-514005										
IN 2	IN 2007DN08165					2007	1123	IN 2007-DN8165						20071022				
CN I	CN 101180059 MX 2007015086					2008	0514		CN 2	1006-	ROOT	1916		2	0071	123		
		3961													0071			
PRIORITY				A		2008	0213			2007-								
FRIURIII	WELPIN	. INFO	• •							2005-					0050			
OTHER SOU	OTHER SOURCE(S):					146:	5027		W 2	.000-	DE OI	55		vi 2	0000	550		

OTHER SOURCE(S): MARPAT 146:5027

Ι

A medicament comprising, sep. or together, (A) a compound of formula (I) in AB free or salt or solvate form, where W, Rx, Ry, R1, R2, R3, R4, R5, R6 and R7 have the meanings as indicated in the specification, and (B) one or more of compds. selected from the group consisting of A2A agonists, A2B antagonists, antihistamines, caspase inhibitors, ENaC inhibitors, LTB4 antagonists, LTD4 antagonists and serine protease inhibitors, for simultaneous, sequential or sep. administration in the treatment of an inflammatory or obstructive airways disease.

312753-06-3

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (medicament containing organic compds. for therapy of inflammatory or

obstructive airways diseases)

312753-06-3 CA RN

2(1H)-Quinolinone, 5-[(1R)-2-[(5,6-diethyl-2,3-dihydro-1H-inden-2-CN yl)amino]-1-hydroxyethyl]-8-hydroxy- (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

7 ANSWER 52 OF 76 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 145:495604 CA

TITLE: Combination of a HMG-CoA reductase inhibitor and a drug intervening in the renin-angiotensin system for

treating respiratory disorders

INVENTOR(S): Lindmark, Bertil; Thoren, Anders; Higenbottam, Timothy William

Astrazeneca AB, Swed.; Astrazeneca UK Limited

PATENT ASSIGNEE(S): SOURCE: PCT Int. Appl., 21pp.

CODEN: PIXXD2 DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE WO 2006117534 A2 20061109 WO 2006-GB1582 20060428 WO 2006117534 A3 20070125 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,

CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM A 20050430

PRIORITY APPLN. INFO.: GB 2005-8924

The invention provides medicaments comprising a combination of a HMG-CoA reductase inhibitor and a drug intervening in the renin-angiotensin system selected from angiotensin II antagonists and angiotensin converting enzyme (ACE) inhibitors optionally in combination with a bronchodilator and a glucocorticosteroid in the treatment of respiratory disorders such as chronic obstructive pulmonary disease (COPD).

312753-06-3, Indacaterol

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(combination of a HMG-CoA reductase inhibitor and a drug intervening in the renin-angiotensin system for treating respiratory disorders) 312753-06-3 CA

RN CN 2(1H)-Quinolinone, 5-[(1R)-2-[(5,6-diethyl-2,3-dihydro-1H-inden-2yl)amino]-1-hydroxyethyl]-8-hydroxy- (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

CORPORATE SOURCE:

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

6 L8 ANSWER 53 OF 76 CA COPYRIGHT 2009 ACS on STN ACCESSION NUMBER:

145:448369 CA

Indacaterol (Novartis/SkyePharma)

Currie, Graeme P.

Aberdeen Royal Infirmary, Aberdeen, AB25 2ZN, UK Current Opinion in Investigational Drugs (Thomson

Scientific) (2006), 7(5), 457-463

CODEN: COIDAZ; ISSN: 1472-4472

Thomson Scientific

Journal; General Review

PUBLISHER: DOCUMENT TYPE:

TITLE:

SOURCE:

AUTHOR(S):

LANGUAGE:

English

A review. In collaboration with SkyePharma, Novartis is developing a AB multidose dry powder inhaler formulation of indacaterol, a long-acting β2 agonist and bronchodilator, for the potential treatment of asthma and chronic obstructive pulmonary disease. In Jan. 2006, Novartis expected phase III clin. trials to start in early 2006, with submission planned for 2007.

312753-06-3, Indacaterol

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(multidose dry powder inhaler formulation of indacaterol, long-acting β2 adrenoceptor agonist and bronchodilator is currently being developed to treat asthma and chronic obstructive pulmonary disease patient)

312753-06-3 CA RN

CN 2(1H)-Quinolinone, 5-[(1R)-2-[(5,6-diethyl-2,3-dihydro-1H-inden-2yl)amino]-1-hydroxyethyl]-8-hydroxy- (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

INVENTOR(S):

THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

42 ANSWER 54 OF 76 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 145:443938 CA

TITLE: Inhalation compositions containing anticholinergies

and 2-indanylaminoethylquinolinones. Bouyssou, Thierry; Konetzki, Ingo; Pieper, Michael P.;

Schnapp, Andreas

PATENT ASSIGNEE(S): Boehringer Ingelheim International GmbH, Germany

SOURCE: U.S. Pat. Appl. Publ., 20pp. CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE:

English FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20060239935 PRIORITY APPLN. INFO.:	A1	20061026		20060421 20050423
OTHER SOURCE(S):	MARPAT	145:443938		

AB The present invention relates to new pharmaceutical compns. for inhalation containing one or more, preferably one anticholinergic in combination with one or more pharmacol. acceptable acid addition salts of I where R1-R4 may be H, alkyl, alkoxy, or alkoxyalkyl and their use in the treatment of respiratory complaints.

312753-16-5D, derivs.

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (inhalation compns. containing anticholinergics and 2-indanylaminoethylquinolinones)

312753-16-5 CA

RN CN 2(1H)-Quinolinone, 5-[2-[(2,3-dihydro-1H-inden-2-yl)amino]-1-hydroxyethyl]-8-hvdroxv- (CA INDEX NAME)

L8 ANSWER 55 OF 76 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 145:432242 CA

TITLE: Treatment of connective tissue diseases of the skin with B2-adrenoceptor agonists

INVENTOR(S): Weidner, Morten Sloth

PATENT ASSIGNEE(S): Astion Development A/S, Den.

SOURCE: PCT Int. Appl., 52pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

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WO 2006108424 A2 20061019 WO 2006-DK50013 20060412 WO 2006108424 A3 20061214 WO 2006108424 A9 20070809
                  WO 2006108424
                                                                                 A9 20070809
                              W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
                                            CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
                                            GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR,
                                            KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX,
                                           MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE,
                                            SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC,
                                           VN, YU, ZA, ZM, ZW
                              RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
                                            IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
                                            CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
                                            GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
                AU 2006233502 A1 20061019 AU 2006-233502 20060412
CA 2604758 A1 20061019 VA 2006-203502 20060412
US 20060235048 A1 20061019 US 2006-402255 20060412
F1 719507 A1 20061018 EP 2006-7632 20060412
F1 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, JU, NL, SE, MC, PT, IB, SI, LIT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, JP 200853873 T
IN 2007DN07745 A 20080129 MX 2007012794 A 20080222 MX 2007-12794 A 20080222 MX 2007-12794 C 2008025 F 20080214 NO 2007005527 A 20080114 NO 2007-5527 C 2008005957 A 2008015 KR 2007-726406 C 20101203214 A 2008016 KR 2007-726406 F 20101203214 A 2008016 KR 2007-726406 C 20101203214 A 2008016 KR 2008016 
                                                                                                                                           JP 2008-505738
                                                                                                                                                                                                                             20071009
                                                                                                                                                                                                                             20071012
                                                                                                                                                                                                                            20071113
                                                                                                                                                CN 2006-80016534 20071113

DK 2005-529 A 20050413

WO 2006-DK50013 W 20060412
 OTHER SOURCE(S):
                                                                                MARPAT 145:432242
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The present invention provides effective and safe medicaments for the treatment of connective tissue diseases of the skin, particularly with respect to the treatment of cutaneous forms of Lupus Erythematosus. The medicaments comprise as the therapeutically active ingredient a beta2 adrenoceptor agonist. The invention furthermore relates to dermatol. compns. without skin sensitization properties and which contain enantiomerically pure or enriched R-enantiomers of a beta2 adrenoceptor

IΤ 312753-06-3, Indacaterol

> RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(treatment of connective tissue diseases of skin with

β2-adrenoceptor agonists)

312753-06-3 CA RN

2(1H)-Ouinolinone, 5-[(1R)-2-[(5,6-diethvl-2,3-dihvdro-1H-inden-2-CN vl)aminol-1-hvdroxvethvll-8-hvdroxv- (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS 15 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 56 OF 76 CA COPYRIGHT 2009 ACS on STN 145:404168 CA

CODEN: PIXXD2

ACCESSION NUMBER:

TITLE:

Medicaments and methods combining an anticholinergic, a corticosteroid, and a long acting beta agonist Sequeira, Joel A.; Yang, Tsong-Toh

INVENTOR(S): PATENT ASSIGNEE(S): Schering Corporation, USA PCT Int. Appl., 26 pp. SOURCE:

DOCUMENT TYPE:

Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

	TENT I						DATE				ICAT:					ATE	
	2006								1	WO 2	006-l	JS119	924		20	060	330
WO									-		200	-	DIT	D11	200	0.3	011
	W:						ΑU,										
							DE,										
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KM,	KN,	KP,	KR,
		KΖ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,	MN,	MW,	MX,
		MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,
		SG,	SK.	SL.	SM.	SY,	TJ.	TM.	TN.	TR.	TT.	TZ.	UA.	UG,	US,	UZ,	VC,
		VN.	YU.	ZA.	ZM.	ZW											
	RW:						CZ,	DE.	DK.	EE.	ES.	FT.	FR.	GB.	GR.	HII.	TE.
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	0.500						TM,										
	2603																
EP	1879																
	R:						CZ,										
		IS,	IT,	LI,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	AL,
		BA,	HR,	MK,	YU												
JP	2008	5346	11		T		2008	0828		JP 2	008-	50442	21		20	0060	330
MX	2007	0120	84		A		2007	1121	1	MX 2	007-	1208	4		20	0070	928
PRIORIT	Y APP	LN.	INFO	. :					1	JS 2	005-6	56642	20P	1	P 20	0050	330
									1	US 2	005-	7344	52P	1	P 20	0051	108

US 2006-786960P P 20060329 WO 2006-HS11924 W 20060330

AR Disclosed are inhalable medicaments and methods based on an anticholinergic in combination with a corticosteroid, and a long acting beta agonist, for simultaneous or sequential administration in the prevention or treatment of a respiratory, inflammatory or obstructive airway disease. In addition, disclosed are inhalable medicaments and methods based on combinations of an anticholinergic and a corticosteroid; an anticholinergic and a long acting beta agonist; or a corticosteroid and a long acting beta agonist, for simultaneous or sequential administration in the prevention or treatment of a respiratory, inflammatory or obstructive airway disease. Also disclosed are inhalable medicaments and methods comprising a phosphodiesterase IV inhibitor for administration in the prevention or treatment of a respiratory, inflammatory or obstructive airwav disease.

312753-06-3, Indacaterol

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(medicaments combining anticholinergic, corticosteroid, and long-acting B-agonist)

312753-06-3 CA RN

CN 2(1H)-Ouinolinone, 5-[(1R)-2-[(5,6-diethyl-2,3-dihydro-1H-inden-2yl)amino]-1-hydroxyethyl]-8-hydroxy- (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 57 OF 76 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 145:368973 CA

TITLE: Indacaterol: asthma therapy treatment of COPD

B2-adrenoceptor agonist AUTHOR(S): Davies, S. L.; Castaner, J.

CORPORATE SOURCE: Prous Science, Barcelona, 08080, Spain SOURCE:

Drugs of the Future (2005), 30(12), 1219-1224

CODEN: DRFUD4; ISSN: 0377-8282 Prous Science

PUBLISHER: DOCUMENT TYPE:

Journal: General Review LANGUAGE: English

A review. The chronic inflammatory syndromes asthma and chronic obstructive pulmonary disease (COPD) are significant causes of morbidity, mortality, increased healthcare costs and hospital admissions. β2-Adrenoceptor agonists are among the first-line therapies for

asthma and COPD due to their bronchodilating effects, but currently available therapeutics are associated with a short duration of action and a broad side effect profile. Indacaterol (QAB-149) is currently undergoing phase II development for the treatment of asthma and COPD. Clin. studies have demonstrated that it is well tolerated and associated with improved cardiovascular safety in both patient populations. Furthermore, it is the first B2-adrenoceptor agonist to provide rapid improvements in bronchodilatory control and FEV1, with a sustained (24 h) duration of action. Indacaterol could therefore provide substantial improvement in the life-threatening symptoms of breathlessness and bronchoconstriction associated with asthma and COPD.

312753-06-3P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(QAB-149 rapidly improved bronchodilatory control, FEV1 with sustained duration of action showing it can provide improvement in

life-threatening symptoms of breathlessness and bronchoconstriction associated with asthma, COPD in patient)

RN 312753-06-3 CA

CN 2(1H)-Ouinolinone, 5-[(1R)-2-[(5,6-diethvl-2,3-dihvdro-1H-inden-2vl)aminol-1-hvdroxvethvll-8-hvdroxv- (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD, ALL CITATIONS AVAILABLE IN THE RE FORMAT

37 ANSWER 58 OF 76 CA COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 144:444937 CA

TITLE: In vitro and in vivo pharmacological characterization of 5-[(R)-2-(5,6-diethyl-indan-2-ylamino)-1-hydroxyethyl]-8-hydroxy-1H-quinolin-2-one (indacaterol), a

novel inhaled β2 adrenoceptor agonist with a 24-h duration of action

Christine A.; McEvoy, Lorraine; Turner, Robert J.;

Battram, Cliff; Charlton, Steven J.; Cuenoud, Bernard; AUTHOR(S): Dowling, Mark R.; Fairhurst, Robin A.; Farr, David; Fozard, John R.; Leighton-Davies, Juliet R.; Lewis,

Trifilieff, Alexandre

CORPORATE SOURCE: Novartis Institutes for BioMedical Research, Horsham, UK

SOURCE: Journal of Pharmacology and Experimental Therapeutics

(2006), 317(2), 762-770 CODEN: JPETAB; ISSN: 0022-3565

PUBLISHER: American Society for Pharmacology and Experimental

Therapeutics Journal LANGUAGE: English

Here, we describe the preclin, pharmacol, profile of indacaterol, a novel, chirally pure inhaled B2 adrenoceptor agonist, in comparison with marketed drugs. Indacaterol is close to a full agonist at the human β2 adrenoceptor (Emax = 73±1% of the maximal effect of isoprenaline; pEC50 = 8.06±0.02), whereas salmeterol displays only partial efficacy (38±1%). The functional selectivity profile of indacaterol over \$1 human adrenoceptors is similar to that of formoterol, whereas its β3 adrenoceptor selectivity profile is similar to that of formoterol and salbutamol. In isolated superfused quinea pig trachea, indacaterol has a fast onset of action (30±4 min) similar to formoterol and salbutamol, and a long duration of action (529±99 min) comparable with salmeterol. In the conscious quinea pig, when given intratracheally as a dry powder, indacaterol inhibits 5-hydroxytryptamine-induced bronchoconstriction for at least 24 h, whereas salmeterol, formoterol, and salbutamol have durations of action of 12, 4, and 2 h, resp. When given via nebulization to anesthetized rhesus monkeys, all of the compds. dose-dependently inhibit methacholine-induced bronchoconstriction, although indacaterol produces the most prolonged bronchoprotective effect and induces the lowest increase in heart rate for a similar degree of antibronchoconstrictor activity. In conclusion, the preclin. profile of indacaterol suggests that this compound has a superior duration of action compatible with once-daily dosing in human, together with a fast onset of action and an improved cardiovascular safety profile

312753-06-3, Indacaterol

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

over marketed inhaled \$2 adrenoceptor agonists.

(in vitro and in vivo pharmacol. characterization of indacaterol, a novel inhaled β2 adrenoceptor agonist with a 24-h duration of action)

RN 312753-06-3 CA

CN 2(1H)-Ouinolinone, 5-[(1R)-2-[(5,6-diethvl-2,3-dihvdro-1H-inden-2vl)aminol-1-hvdroxvethvll-8-hvdroxv- (CA INDEX NAME)

Absolute stereochemistry.

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3.8
                              THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS
REFERENCE COUNT:
                               RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
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ANSWER 59 OF 76 CA COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 144:239931 CA

TITLE: Pharmaceutical compositions for the treatment of respiratory and gastrointestinal disorders

INVENTOR(S): Jung, Birgit; Himmelsbach, Frank

Patent

PATENT ASSIGNEE(S): Boehringer Ingelheim International GmbH, Germany;

Boehringer Ingelheim Pharma Gmbh & Co. KG

SOURCE: PCT Int. Appl., 321 pp. CODEN: PIXXD2

DOCUMENT TYPE: LANGUAGE . English

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

PA:	TENT	NO.			KIN		DATE				ICAT				D.	ATE	
	2006				A2		2006								2	0050	803
	W:	CN, GE,	CO, GH,	CR, GM,	CU, HR,	CZ, HU,	AU, DE, ID, LU,	DK, IL,	DM, IN,	DZ,	EC, JP,	EE, KE,	EG, KG,	ES, KM,	FI, KP,	GB, KR,	GD, KZ,
		NG, SL,	NI,	NO, SY,	NZ,	OM,	PG, TN,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,
	RW:	IS, CF,	IT, CG,	LT,	LU, CM,	LV,	CZ, MC, GN,	NL, GQ,	PL, GW,	PT, ML,	RO, MR,	SE, NE,	SI, SN,	SK, TD,	TR, TG,	BF, BW,	BJ, GH,
		KG,	KZ,	MD,	RU,	TJ,	NA, TM,	AP,	EA,	EP,	OA						
US	2006	0035	893		A1		2006	0216		US 2	005-	1896	43		2	0050	726
	2575																
EP	1784															0050	
	R:						CZ,										
			HR.			20,	,	,	1127	,	,	110,		01,	J.,		,
,TP	2008						2008	0327		JP 2	007-	5252	27		2	0050	803
	JP 2008509177 US 20090017036										008-					0080	
PRIORIT					***		2005	0113		EP 2 US 2	004- 005-	1880 1896	8 43		A 2 A1 2	0040	807 726

MARPAT 144:239931 OTHER SOURCE(S):

The present invention relates to novel pharmaceutical compns. comprising at least 1 EGFR kinase inhibitor and at least one addnl. active compound selected from β-2 mimetics, steroids, PDE-IV inhibitors, p38 MAP kinase inhibitors, NK1 antagonists and endothelin-antagonists, processes for preparing the compns, and the use thereof as drugs in the treatment of respiratory or gastrointestinal complaints, as well as inflammatory diseases of the joints, the skin or the eyes. Thus, an inhalable powder contained an EGFR kinase inhibitor 150, formoterol fumarate dihydrate 50, and lactose 12,300 mg/capsule.

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

³¹²⁷⁵³⁻³³⁻⁶

(pharmaceutical compns. for treatment of respiratory and gastrointestinal disorders)

RN 312753-33-6 CA

CN 2(1H)-Quinolinone, 5-[2-[(5,6-diethyl-2,3-dihydro-1H-inden-2-yl)amino]-1hydroxyethyl]-8-hydroxy- (CA INDEX NAME)

L8 ANSWER 60 OF 76 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 144:239926 CA

TITLE: Inhalable medicaments containing a new

anticholinergic, corticosteroids, and betamimetics INVENTOR(S): Pieper, Michael P.; Pairet, Michael

PATENT ASSIGNEE(S): Boehringer Ingelheim International GmbH, Germany

SOURCE: U.S. Pat. Appl. Publ., 15 pp. CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT: 1

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PA'	TENT 1	.00			KIN)	DATE			APF	LI	CAT	I NO	NO.		D2	ATE	
US	2006	0034	776		A1		2006	0216		US	20	005-1	1823	82		20	050	715
DE	1020	04031	3886		A1		2006	0223		DE	20	004 - 1	1020	0403	8886	21	0040	310
DE	1020	04053	3023		A1		2006	0504		DE	20	04-1	1020	0405	3023	20	0041	103
CA	2573	370			A1		2006	0223		CA	20	05-2	2573	370		20	0501	304
WO	2006	01839	91		A1		2006	0223		WO	20	05-E	P53	840		20	050	304
	W:	AE.	AG.	AL.	AM.	AT.	AU,	AZ.	BA.	BE	3.	BG.	BR.	BW.	BY.	BZ.	CA.	CH.
							DE,											
							ID,											
							LU,											
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	RW:				CH.	CY.	CZ,	DE.	DK.	EF	1.	ES.	FT.	FR.	GB.	GR.	HU.	TE.
							MC,											
							GN,											
							NA,											
					RU.			,	,			,	,	,	,	,	,	,
EP	1778							0502		EP	20	05-1	7719	86		21	0050	304
							CZ,											
							LV,											12,
.TP	2008																	204
PRIORIT					1		2000	0027						04031				
11101111			0.	• •										0405				
										DE	20		1020	0405.	102.02	1 21	,041.	105

A pharmaceutical formulation comprising: (a) at least one anticholinergic (I, wherein X- is an anion with a single neg. charge); (b) at least one corticosteroid (2); and (c) at least one betamimetic (3), and the enantiomers, mixts. of the enantiomers, racemates, solvates, hydrates, or physiol. acceptable acid addition salts thereof, processes for preparing them and their use in the treatment of respiratory diseases. An inhalable aerosol composition contained I (X = Br), budesonide, formoterol fumarate dihydrate, soya lecithin, and TG134a/TG227 (propellant).

312753-33-6

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (inhalable medicaments containing an anticholinergic, corticosteroid, and betamimetic)

RN 312753-33-6 CA

CN 2(1H)-Quinolinone, 5-[2-[(5,6-diethyl-2,3-dihydro-1H-inden-2-yl)amino]-1hydroxyethyl]-8-hydroxy- (CA INDEX NAME)

L8 ANSWER 61 OF 76 CA COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 144:156734 CA

TITLE:

Salts of basic drugs with acidic polymeric sugars for inhalant formulations INVENTOR(S): Anson, Michael Simon; Crookes, Derek Leslie; Trivedi, Harish Shivprasad

PATENT ASSIGNEE(S): SOURCE:

Glaxo Group Limited, UK PCT Int. Appl., 42 pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	TENT	NO.			KIN		DATE			APPL	ICAT	ION	NO.		D.	ATE	
	2006				A2		2006 2006			WO 2	005-	EP79	91		2	0050	720
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KM,	KP,	KR,	KZ,
		LC,	LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,
							PG,										
					ΤJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UΖ,	VC,	VN,	YU,
			ZM,														
	RW:						CZ,										
							MC,										
							GN,										
							NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,
RIORIT	v 700		KZ,		RU,	TJ,	TM			GB 2	004-	1620	7		7 2	0040	722
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	2753-																

(prepns. and stability of salts of basic drugs with acidic polymeric sugars for inhalant formulations)

312753-06-3 CA RN

CN 2(1H)-Quinolinone, 5-[(1R)-2-[(5,6-diethyl-2,3-dihydro-1H-inden-2yl)amino]-1-hydroxyethyl]-8-hydroxy- (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 62 OF 76 CA COPYRIGHT 2009 ACS on STN 144:88180 CA

ACCESSION NUMBER:

TITLE:

Method for preparing 8-substituted

oxy-5-((R)-2-halo-1-hydroxy-ethy1)-(1H)-quinolin-2-ones employing a chiral reduction step

INVENTOR(S):

Lohse, Olivier; Vogel, Caspar; Abel, Stephan

PATENT ASSIGNEE(S): SOURCE:

Novartis AG, Switz.; Novartis Pharma GmbH PCT Int. Appl., 47 pp.

CODEN: PIXXD2

DOCUMENT TYPE: LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PA	TENT	NO.			KIND DATE A2 200512					APPL	ICAT	ION	NO.			ATE	
	2005				A2					WO 2	005-	EP66	86			0050	
WU	Z003								D2	DD	D.C.	DD.	DIA	DV	DE	0.3	CII
	W :							AZ,									
								DK,									
								IL,									
								LV,									
								PH,									
		SL,	SM,	SY,	ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UΖ,	VC,	VN,	YU,
		ZA,	ZM,	ZW													
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	ΜZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,
		AZ,	BY,	KG,	ΚZ,	MD,	RU,	TJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,
		EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,	IS,	IT,	LT,	LU,	MC,	NL,	PL,	PT,
		RO,	SE,	SI,	SK,	TR,	BF,	BJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,
		MR,	NE,	SN,	TD,	TG											
AU	2005	2546	98		A1		2005	1229		AU 2	005-	2546	98		2	0050	621
AU	2005	2546	98		B2		2008	0925									
CA	2566	388			A1		2005	1229		CA 2	005-	2566	388		2	0050	621
	1968							0523		CN 2						0050	
	1791							0606								0050	
		AT,															
								NL,									
				MK,		20,	110,	,	- ш,	,	1.07	UL,	U1,	010,	111,	,	2227

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JP 2008503526 T 20080207 JP 2007-517180
BR 2005012298 A 20080325 BR 2005-12298
                                                                 20050621
                                                                   20050621
    IN 2006DN06563
                        A
                              20070831 IN 2006-DN6563
                                                                   20061106
    ZA 2006009257
                        A
                              20080730 ZA 2006-9257
                                                                   20061107
                         A 20070212 MX 2006-14695
A 20070314 KR 2006-726958
A 20070321 NO 2007-400
    MX 2006014695
                                                                   20061214
    KR 2007029752
                                                                   20061221
    NO 2007000400
                                                                   20070122
    US 20090054653
                        A1 20090226
                                           US 2008-569140
                                                                   20080813
PRIORITY APPLN. INFO.:
                                            GB 2004-13960
                                                               A 20040622
                                            WO 2005-EP6686
                                                               W 20050621
OTHER SOURCE(S): CASREACT 144:88180; MARPAT 144:88180
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AB A process for preparing 8-substituted oxv-5-((R)-2-halo-1-hvdroxv-ethv1)-(1 H)-guinolin-2-ones or acceptable solvates thereof which are useful intermediates from which to prepare 5-[(R)-2-(5,6-diethylindan-2-ylamino)-1hydroxyethyl]-8-hydroxy-(1H)-quinolin-2-one salts. The process involves reacting a 5-(α-haloacetyl)-8-substituted oxy-(1H)-quinolin-2-one with a reducing agent in the presence of a chiral agent and a base to form a 8-(substituted oxy)-5-((R)-2-halo-1-hydroxy-ethyl)-(1H)-quinolin-2-one, said chiral agent having a formula I [wherein M = Ru, Rh, Ir, Fe, Co, or Ni; L = aryl or arylalkyl; X = H or halo; R1 = alkyl, cycloalkyl, aryl, etc.; R2 and R3 = Ph or together form a cyclohexane or cyclopentane ring; Z = bond or 1,1'-ferrocenediyl].

435273-74-8P

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

(method for producing and manufacturing 8-substituted oxy-5-((R)-2-halo-1-hydroxy-ethyl)-(1 H)-quinolin-2-ones employing a chiral reducing agent for ketone reduction step)

RN 435273-74-8 CA

CN 2(1H)-Ouinolinone, 5-[(1R)-2-[(5,6-diethyl-2,3-dihydro-1H-inden-2vl)aminol-1-hvdroxvethvl]-8-hvdroxv-, (2Z)-2-butenedioate (1:?) (CA INDEX NAME)

CM 1

CRN 312753-06-3 CMF C24 H28 N2 O3

Absolute stereochemistry.

CM 2

CRN 110-16-7 CMF C4 H4 O4

Double bond geometry as shown.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 63 OF 76 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 144:27574 CA

TITLE: Combinations comprising antimuscarinic agents and $\beta\text{-adrenergic agonists}$

INVENTOR(S): Gras Escardo, Jordi; Calvo, Jesus Llenas; Ryder,

Hamish; Orviz Diaz, Pio

PATENT ASSIGNEE(S): Spain

SOURCE: U.S. Pat. Appl. Publ., 19 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 5

PATENT INFORMATION:

P	ATENT NO.	KIND	DATE	APPLICATION NO.	DATE
_					
U	S 20050267078	A1	20051201	US 2005-141428	20050531
E	S 2257152	A1	20060716	ES 2004-1312	20040531
	S 2257152	В1	20070701		
	T 2005MI1021	A1	20050831	IT 2005-MI1021	20050531
	E 2005000366	A1	20051130	IE 2005-366	20050531
	S 20050267135	A1	20051201	US 2005-141169	20050531
	L 1029151	A1	20051205	NL 2005-1029151	20050531
N	L 1029151	C2	20060622		

AU AU	20005 2005 2005 2005	2471 2471	07		A A1 A1 A1		2005 2005	1207 1208 1208 1208		AU 2 AU 2	005- 005- 005- 005-	2471 2471	07		2	0050 0050 0050 0050	531 531
CA	2533	061	80		B2 A1		2008 2005	1208		CA 2	005-	2533	061		2	0050	531
CA CA	2533 2568 2569	566 077			C A1 A1		2008 2005 2005	1208 1208		CA 2	005- 005-	2569	077		2	0050	531
WO	2005				A1			1208			005-					0050	
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KM,	KP,	KR,	KZ,
		LC.	LK,	LR.	LS.	LT.	LU.	LV.	MA.	MD.	MG,	MK.	MN.	MW.	MX.	MZ.	NA.
											RO,						
		SL,	SM,	SY,	TJ,	TM.	TN,				UA,						
		ZA,	ZM,	ZW	10,	111/	1117	1117	11,	10,	OIL	00,	00,	02,	,	,	10,
	DM.	BW,			KE	T.S	MM	MZ	MA	SD	SL,	97	TZ	TIC	7M	214	ΔM
	1011.	AZ,		KG,							BE,						
				FI.													
		EE,									IT,						
			SE,		SK,		Br,	ы,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,
			NE,	SN,	TD,	TG									_		
WO	2005				A1			1208			005-					0050	
	W:										BG,						
											EC,						
		GE,	GH,								JP,						
		LC,									MG,						
		NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,
		SL,	SM,	SY,	TJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,
		ZA,	ZM,	ZW													
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,
		AZ,	BY,	KG,	KZ,	MD,	RU,	TJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,
		EE.	ES.	FI.	FR.	GB,	GR.	HU,	IE.	IS.	IT,	LT,	LU,	MC.	NL.	PL,	PT.
			SE,								CI,						
			NE,		TD,	TG											
WO	2005				A1		2005	1208		WO 2	005-	EP58	41		2	0050	531
	W:	AE,	AG.	AL.	AM.	AT,	AU,	AZ.	BA,	BB.	BG,	BR.	BW.	BY.	BZ.	CA,	CH,
											EC,						
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		LC.									MG,						
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		ZA,	ZM,	ZW	,	,	,	,	,	,	011,	00,	00,	·,	,	,	,
	BM.	BW,	GH,	GM,	KE.	LS	МИ	MZ.	NΔ	SD	SL,	\$7	TZ.	IIG	ZM.	7.W	ΔM
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		EE.		FI.							IT,						
		RO,		SI,	SK,						CI,						
				SN,	TD,	TG,	Dr,	ы,	CF,	co,	CI,	CP1,	GM,	GIV,	GΩ,	Gw,	PIL,
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	2005		200		A1		2005						21			0050	
	2178				A		2005				005-					0050	
	9121				A1		2006				005-					0050	
	2005		69		A		2006			GR 2	005-	1002	69		2	0050	531
	1006				B2		2008								_		
	2419				A			0510		GB 2	005-	2650	2		2	0050	531
	2419				В		2007										
	2006		83		T		2006				006-		19			0050	
BE	1016	608			A5		2007	U206		BE 2	005-	∠68			2	0050	531

EP	1761280			A1						2005-					0050	
										ES,						
	IS,	IT,	LI,	LT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	AL,	BA,
			MK,													
EP	1763368			A1		2007	0321		EP 2	2005-	7505	3.8		2	0050	531
	1763368			B1		2009								_		001
DI		DF	DC.		CV			DK	22	ES,	ET	FD	CD	CD	шт	TE
					ьо,	PIC,	MT.	PL,	PI,	RO,	SE,	51,	or,	IK,	AL,	DA,
		LV,	MK,											_		
	1763369			A1					EP 2	2005-	7517	02		2	0050	531
EP	1763369			B1		2008										
										ES,						
	IS,	IT,	LI,	LT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	AL,	BA,
	HR,	LV,	MK,	YU												
ZA	20060002	61		A		2007	0425		ZA 2	2006-	261			2	0050	531
CN	1960759			A		2007	0509		CN 2	2005-	8001	7685		2	0050	531
CN	1960761			A		2007	0509		CN 2	2005-	8001	7693		2	0050	531
	1972716			A		2007				2005-					0050	
	20060001	39		12		2007				2006-					0050	
	544539	-		Δ.		2007				2005-		3.9			0050	
	20050116	62		7		2008				2005-					0050	
	20050116	66		A A A A A		2008				2005-					0050	
	20050116			A		2008				2005-					0050	
	20085009			T		2008				2007-					0050	
	20085009	90		T		2008				2007-					0050	
EP	1891973			A1		2008				2007-					0050	
	R: AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,
	IS,	IT,	LI,	LT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	AL,	BA,
	HR,	LV,	MK,	YU												
EP	1891974			A1		2008	0227		EP 2	2007-	1964	6		2	0050	531
EP		BE,	BG,							ES,			GB,			
EP	R: AT,			CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,		GR,	HU,	ΙE,
EP	R: AT, IS,	IT,	LI,	CH, LT,	CY,	CZ,	DE,	DK,	EE,		FI,	FR,		GR,	HU,	ΙE,
	R: AT, IS, HR,	IT,		CH, LT,	CY,	CZ, MC,	DE, NL,	DK, PL,	EE, PT,	ES, RO,	FI, SE,	FR,		GR, TR,	HU, AL,	IE, BA,
CH	R: AT, IS,	IT,	LI,	CH, LT, YU	CY,	CZ,	DE, NL, 0229	DK, PL,	EE, PT, CH 2	ES, RO,	FI, SE,	FR, SI,		GR, TR,	HU, AL, 0050	IE, BA, 531
CH ES	R: AT, IS, HR, 696962 2293849	IT,	LI,	CH, LT, YU A5 A1	CY,	CZ, MC, 2008	DE, NL, 0229 0316	DK, PL,	EE, PT, CH 2	ES, RO,	FI, SE,	FR, SI,		GR, TR,	HU, AL,	IE, BA, 531
CH ES	R: AT, IS, HR, 696962 2293849 2293849	IT,	LI,	CH, LT, YU A5 A1 B2	CY, LU,	CZ, MC, 2008 2008 2009	DE, NL, 0229 0316 0416	DK, PL,	EE, PT, CH 2 ES 2	ES, RO, 2005-	FI, SE, 85 5003	FR, SI,		GR, TR,	HU, AL, 0050	IE, BA, 531
CH ES	R: AT, IS, HR, 696962 2293849 2293849 1905451	IT, LV,	LI, MK,	CH, LT, YU A5 A1 B2 A1	CY, LU,	CZ, MC, 2008 2008 2009 2008	DE, NL, 0229 0316 0416 0402	DK, PL,	EE, PT, CH 2 ES 2	ES, RO, 2005	FI, SE, 85 5003	FR, SI, 4	SK,	GR, TR, 2	HU, AL, 0050 0050	IE, BA, 531 531
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CH ES	R: AT, IS, HR, 696962 2293849 2293849 1905451 R: AT, IS,	IT, LV, BE, IT,	LI, MK, BG, LI,	CH, LT, YU A5 A1 B2 A1 CH, LT,	CY, LU,	CZ, MC, 2008 2008 2009 2008 CZ,	DE, NL, 0229 0316 0416 0402 DE,	DK, PL,	EE, PT, CH 2 ES 2 EP 2 EE,	ES, RO, 2005	FI, SE, 85 5003 2376 FI,	FR, SI, 4 0 FR,	SK,	GR, TR, 2 2 GR,	HU, AL, 0050 0050 HU,	IE, BA, 531 531 531 IE,
CH ES ES EP	R: AT, IS, HR, 696962 2293849 2293849 1905451 R: AT, IS, HR,	IT, LV, BE, IT,	LI, MK,	CH, LT, YU A5 A1 B2 A1 CH, LT,	CY, LU,	CZ, MC, 2008 2008 2009 2008 CZ, MC,	DE, NL, 0229 0316 0416 0402 DE, NL,	DK, PL, DK, PL,	EE, PT, CH 2 ES 2 EP 2 EE, PT,	ES, RO, 2005- 2006- 2007- ES, RO,	FI, SE, 85 5003 2376 FI, SE,	FR, SI, 4 0 FR, SI,	SK,	GR, TR, 2 2 GR, TR,	HU, AL, 0050: 0050: HU, AL,	IE, BA, 531 531 IE, BA,
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CH ES ES EP	R: AT, IS, HR, 696962 2293849 1905451 R: AT, IS, HR, 2002843 R: AT, IS,	BE, IT, LV,	BG, LI, MK,	CH, LT, YU A5 A1 B2 A1 CH, LT, YU A2 A3 CH, LT,	CY, LU, CY, LU,	CZ, MC, 2008 2008 2009 2008 CZ, MC, 2008 2009 CZ,	DE, NL, 0229 0316 0416 0402 DE, NL, 1217 0408 DE,	DK, PL, DK, PL,	EE, PT, CH 2 ES 2 EP 2 EE, PT, EP 2	ES, RO, 2005- 2006- ES, RO,	FI, SE, 85 5003 2376 FI, SE, 1447	FR, SI, 4 0 FR, SI, 8 FR,	GB, SK,	GR, TR, 2 2 GR, TR, 2 GR,	HU, AL, 0050 0050 HU, AL,	IE, BA, 531 531 IE, BA, 531
CH ES ES EP EP	R: AT, IS, HR, 696962 2293849 2293849 1905451 R: AT, IS, HR, 2002843 R: AT, IS, HR,	BE, IT, LV,	LI, MK, BG, LI, MK,	CH, LT, YU A5 A1 CH, LT, YU A2 A3 CH, LT, YU	CY, LU, CY, LU,	CZ, MC, 2008 2009 2008 CZ, MC, 2008 2009 CZ, MC,	DE, NL, 0229 0316 0416 0402 DE, NL, 1217 0408 DE, NL,	DK, PL, DK, PL,	EE, PT, CH 2 ES 2 EP 2 EE, PT, EP 2	ES, RO, 2005-2006-2006-2007-2008-2008-2008-2008-2008-2008-2008	FI, SE, 85 5003 2376 FI, SE, 1447 FI, SE,	FR, SI, 4 0 FR, SI, 8 FR, SI,	GB, SK,	GR, TR, 2 GR, TR, 2 GR, TR,	HU, AL, 0050 0050 HU, AL, 0050 HU,	IE, BA, 531 531 IE, BA, 531 IE, BA,
CH ES ES EP EP EP	R: AT, IS, HR, 696962 2293849 1905451 R: AT, IS, HR, 2002843 R: AT, IS, HR,	BE, IT, LV,	BG, LI, MK,	CH, LT, YU A5 A1 B2 A1 CH, LT, YU A2 A3 CH, LT, YU	CY, LU, CY, LU,	CZ, MC, 2008 2009 2009 CZ, MC, 2008 2009 CZ, MC,	DE, NL, 0229 0316 0416 0402 DE, NL, 1217 0408 DE, NL,	DK, PL, DK, PL,	EE, PT, CH 2 ES 2 EP 2 EE, PT, EP 2	ES, RO, 2005-2006-2007-2007-2008-2008-2008-2008-2008-2008	FI, SE, 85 5003 2376 FI, SE, 1447 FI, SE,	FR, SI, 4 0 FR, SI, 8 FR, SI,	GB, SK,	GR, TR, 2 GR, TR, 2 GR, TR,	HU, AL, 0050 0050 HU, AL,	IE, BA, 531 531 IE, BA, 531 IE, BA,
CH ES ES EP EP EP	R: AT, IS, HR, 696962 2293849 1905451 R: AT, IS, HR, 2002843 2002843 R: AT, IS, HR, 2002844 42002844	BE, IT, LV,	BG, LI, MK, BG, LI, MK,	CH, LT, YU A5 A1 B2 A1 CH, LT, YU A2 CH, LT, YU A3	CY, LU, CY, LU,	CZ, MC, 2008 2009 2008 CZ, MC, 2008 2009 CZ, MC,	DE, NL, 0229 0316 0416 0402 DE, NL, 1217 0408 DE, NL,	DK, PL, DK, PL,	EE, PT, CH 2 ES 2 EP 2 EE, PT, EP 2 EE, PT,	ES, RO, 2005-2006-2007-2008-2008-2008-2008-2008-2008-2008	FI, SE, 85 5003 2376 FI, SE, 1447 FI, SE,	FR, SI, 4 0 FR, SI, 8 FR, SI, 9	GB, SK,	GR, TR, 2 2 GR, TR, 2 GR, TR,	HU, AL, 0050 0050 HU, AL, 0050 HU, AL,	IE, BA, 531 531 IE, BA, 531 IE, BA,
CH ES ES EP EP EP	R: AT, IS, 696962 2293849 1905451 R: AT, IS, HR, 2002843 R: AT, IS, HR, 2002844 R: AT,	BE, IT, LV, BE, IT, LV, BE,	BG, LI, MK, BG, LI, MK,	CH, LT, YU A5 A1 B2 A1 CH, LT, YU A2 A3 CH, LT, YU A2	CY, LU, CY, LU,	CZ, MC, 2008 2009 2008 CZ, MC, 2008 2009 CZ, MC, 2008 2009 CZ,	DE, NL, 0229 0316 0416 0402 DE, NL, 1217 0408 DE, NL, 1217 0304 DE,	DK, PL, DK, PL, DK, PL,	EE, PT, CH 2 ES 2 EP 2 EE, PT, EP 2 EE, EP 2	ES, RO, 2008-1	FI, SE, 85 5003 2376 FI, SE, 1447 FI, SE,	FR, SI, 4 0 FR, SI, 8 FR, SI, 9 FR,	GB, SK, GB, SK,	GR, TR, 2 GR, TR, 2 GR, TR, GR, TR,	HU, AL, 0050: 0050: HU, AL, 0050: HU, AL,	IE, BA, 531 531 IE, BA, 531 IE, BA, 531 IE,
CH ES ES EP EP EP	R: AT, IS, 696962 2293849 1905451 R: AT, IS, HR, 2002843 R: AT, IS, HR, 2002844 R: AT,	BE, IT, LV, BE, IT, LV, BE,	BG, LI, MK, BG, LI, MK,	CH, LT, YU A5 A1 B2 A1 CH, LT, YU A2 A3 CH, LT, YU A2	CY, LU, CY, LU,	CZ, MC, 2008 2009 2008 CZ, MC, 2008 2009 CZ, MC, 2008 2009 CZ,	DE, NL, 0229 0316 0416 0402 DE, NL, 1217 0408 DE, NL, 1217 0304 DE,	DK, PL, DK, PL, DK, PL,	EE, PT, CH 2 ES 2 EP 2 EE, PT, EP 2 EE, EP 2	ES, RO, 2005-2006-2007-2008-2008-2008-2008-2008-2008-2008	FI, SE, 85 5003 2376 FI, SE, 1447 FI, SE,	FR, SI, 4 0 FR, SI, 8 FR, SI, 9 FR,	GB, SK, GB, SK,	GR, TR, 2 GR, TR, 2 GR, TR, GR, TR,	HU, AL, 0050: 0050: HU, AL, 0050: HU, AL,	IE, BA, 531 531 IE, BA, 531 IE, BA, 531 IE,
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CH ESS EP EP EP EP EP	R: AT, HR, HR, HR, HR, HR, HR, HR, HR, HR, HR	BE, IT, LV, BE, IT, LV,	LI, MK, BG, LI, MK, BG, LI, MK,	CH, LT, YU A5 A11 B22 CH, LT, YU A2 A3, CH, LT, YU A2 A3 CH, LT, YU A2 A3 CH, A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A1	CY, LU, CY, LU,	CZ, MC, 2008 2009 2008 CZ, MC, 2008 2009 CZ, MC, 2008 2009 CZ, MC, 2008 2009 CZ, MC, 2008 2009 CZ, 2008 2009	DE, NL, 0229 0316 0416 0402 DE, NL, 1217 0408 DE, NL, 1217 0304 DE, NL, 1217	DK, PL, DK, PL, DK, PL,	EE, PT, CH 2 ES 2 EP 2 EE, PT, EP 2 EE, PT, EP 2	ES, RO, 2005-2006-2006-2008-2008-2008-2008-2008-2008	FI, SE, 85 5003 2376 FI, SE, 1447 FI, SE, 1447 FI, SE, 1485	FR, SI, 4 0 FR, SI, 8 FR, SI, 9 FR, SI,	GB, SK, GB, SK,	GR, TR, 2: GR, TR, CR, CR, TR, CR, CR, CR, CR, CR, CR, CR, CR, CR, C	HU, AL, 0050 0050 HU, AL, 0050 HU, AL, 0050	IE, BA, 531 IE, BA, 531 IE, BA, 531 IE, BA, 531
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AB Combinations comprising (a) a $\beta 2$ -agonist and (b) an antagonist of M3 muscarinic receptors which is 3(R)-(2-hydroxy-2,2-dithien-2-ylacetoxy)-1-(3-phenoxypropyl)-1-azoniabicyclo[2,2.2]octane, in the form of a salt having an anion X, which is a pharmaceutically acceptable anion of a mono or polyvalent acid are useful, e.g., for the treatment of respiratory disease, e.g., asthma or chronic obstructive pulmonary disease.

IT 312753-06-3
RL: PAC (Pharmacological activity); PEP (Physical, engineering or chemical

process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(antiasthmatic combinations comprising antimuscarinic agents and β -adrenergic agonists)

RN 312753-06-3 CA

2(1H)-Quinolinone, 5-[(1R)-2-[(5,6-diethyl-2,3-dihydro-1H-inden-2-yl)amino]-1-hydroxyethyl]-8-hydroxy- (CA INDEX NAME)

Absolute stereochemistry.

L8 ANSWER 64 OF 76 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 144:17179 CA

TITLE: Muscarinic M3 antagonist combination with

β-adrenergic agonists, and use for treatment of respiratory conditions

INVENTOR(S): Gras Escardo, Jordi; Llenas Calvo, Jesus; Ryder,

Hamish; Orviz Diaz, Pio

PATENT ASSIGNEE(S): Almirall Prodesfarma S. A., Spain

SOURCE: Fr. Demande, 45 pp.

CODEN: FRXXBL

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT: 5

PATENT INFORMATION:

PAT	TENT NO.	KIND	DATE	APPLICATION NO.	DATE
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				2006-405888		20060418
			US	2007-726982	B1	20070323

OTHER SOURCE(S): MARPAT 144:17179

- AB The invention discloses a combination, a product, a kit of parts, and a packaging including (a) a B2-agonist and (b) a muscarinic M3 receptor antagonist [e.g. 3(R)-(2-hydroxy-2,2-dithien-2-ylacetoxy)-1-(3-phenoxypropyl)-1-azoniabicyclo[2.2.2]-octane], in the form of a salt having an anion X which is a pharmaceutically acceptable anion of a monor polyfunctional acid, their use and a process of treatment of a patient having, or susceptible to, a respiratory disease.
- IT 312753-06-3
 - RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 - (muscarinic M3 antagonist combination with β -adrenergic agonists for treatment of respiratory conditions)
- RN 312753-06-3 CA
- N 2(1H)-Quinolinone, 5-[(1R)-2-[(5,6-diethyl-2,3-dihydro-1H-inden-2yl)amino]-1-hydroxyethyl]-8-hydroxy- (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

7 L8 ANSWER 65 OF 76 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER:

144:11584 CA

TITLE: Combinations of glycopyrrolate and $\beta-2$

adrenoceptor agonists in the treatment of an inflammatory or obstructive airways disease Collingwood, Stephen Paul

INVENTOR(S): PATENT ASSIGNEE(S):

Novartis AG, Switz.; Novartis Pharma GmbH

SOURCE: PCT Int. Appl., 38 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

	ENT :				KIND DATE					APPL							
WO	2005	1104	02		A1		2005	1124		WO 2	005-	EP53	54		2	0050	517
	W:						AU,										
		CN,	co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KM,	KP,	KR,	KZ,
		LC,	LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,
		NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,
		SL,	SM,	SY,	TJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,
		ZA,	ZM,	ZW													
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,
		AZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,
		EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,	IS,	ΙT,	LT,	LU,	MC,	NL,	PL,	PT,
		RO,	SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,
		MR,	ΝE,	SN,	TD,	TG											
	2005																
	2563																
EP	1755	590			A1		2007	0228		EP 2	005-	7496	35		2	0050	517
	R:						CZ,									HU,	ΙE,
							MC,										
	1953						2007										
	2005		27		A		2007	1204		BR 2	005-	1132	7		2		
JΡ	2007	5380	36		T		2007	1227		JP 2	007-	5170	74		2	0050	517

ZA 2006008123	A	20080730	ZA 2006-8123		20060929
KR 2007011519 MX 2006013382	A A	20070124 20070323	KR 2006-724115 MX 2006-13382		20061117 20061117
IN 2006CN04247 NO 2006005787	A A	20070706	IN 2006-CN4247 NO 2006-5787		20061117
US 20080267886	A1	20081030	US 2008-568559		20080707
PRIORITY APPLN. INFO.:			GB 2004-11056 WO 2005-EP5354	A W	20040518 20050517

OTHER SOURCE(S): MARPAT 144:11584

AB A medicament comprises, sep. or together (A) glycopyrrolate; and (B) and a β-2 adrenoceptor agonist for simultaneous, sequential or sep. administration in the treatment of an inflammatory or obstructive airways disease. Pharmaceutical compns. such dry powder inhalers that contain glycopyrrolate and maleate are described.

IT 753498-25-8

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (combinations of glycopyrrolate and β -2 adrenoceptor agonists in the treatment of an inflammatory or obstructive airways disease)

RN 753498-25-8 CA

2(1H)-Quinolinone, 5-[(1R)-2-[(5,6-diethyl-2,3-dihydro-1H-inden-2-yl)amino]-1-hydroxyethyl]-8-hydroxy-, (2Z)-2-butenedioate (1:1) (CA INDEX NAME)

CM 1

CRN 312753-06-3 CMF C24 H28 N2 O3

Absolute stereochemistry.

CM 2

CRN 110-16-7 CMF C4 H4 O4

Double bond geometry as shown.



REFERENCE COUNT:

11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 66 OF 76 CA COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 142:225794 CA

ACCESSION NUMBER: 142:225794
TITLE: Medicament

TITLE: Medicaments for inhalation comprising betamimetics and
an anticholinergic agent
INVENTOR(5): Germever, Sabine: Meade, Christopher John Montague:

NVENIOR(S): Germeyer, Sabine; Meade, Christopher John Montague; Meissner, Helmut; Morschhaeuser, Gerd; Pairet, Michel; Pestel, Sabine; Pieper, Michael P.; Pohl, Gerald; Reichl, Richard; Speck, Georg; Konetzki, Ingo

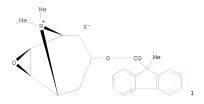
PATENT ASSIGNEE(S): Boehringer Ingelheim International G.m.b.H., Germany;
Boehringer Ingelheim Pharma G.m.b.H. & Co. K.-G.
SOURCE: PCT Int. Appl., 38 pp.

OURCE: PCT Int. Appl., 38 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

PA'	PATENT NO.					KIND DATE					ICAT		DATE				
WO	2005	0139	92		A1		2005	0217							20040717		
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,
		CN,	co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,
		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,
		ΤJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	ΜZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,
		ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,
		EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	ΙT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,
		SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,
			TD,														
	2005							0519									
CA	2533	791			A1		2005	0217		CA 2	004-	2533	791		2	0040	717
	1651						2006	0503		EP 2	004-	7411	15		2	0040	717
EP	1651	221			B1		2009	0114									
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
							TR,										
JP	2007	5001	46		T		2007	0111		JP 2	006-	5214	51		2	0040	717
AT	4206	41			T		2009	0115		AT 2	004-	7411	15		2	0040	717
	2316				Т3		2009	0416								0040	
RIORIT	Y APP	LN.	INFO	. :							003-				A 2		
											003-					0031	
										WO 2	004-	EP79	97	1	7 2	0040	717
THER S	OURCE	(S):			MAR	PAT	142:	2257	94								



AB The present invention relates to novel pharmaceutical compns. based on beta2 agonists and salts of a new anticholinergic, processes for preparing them and their use in the treatment of respiratory complaints, wherein the anticholinergic agent has the formula I. Scopine 9-methyl-fluorene-9-carboxylate methobromide (II) was prepared by the

reaction of scopine 9-methyl-fluorene-9-carboxylate with 50% Me bromide solution in acetonitrile. The crystals precipitated were separated off and recrystd.

from di-Et ether to purify them, yield = 70%, m.p. = 214°.

Inhalant powders contained II 50, fomoterol fumarate dihvdrate 12, and

lactose 12408 µg per capsule.

IT 312753-33-6

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (medicaments for inhalation comprising betamimetics and anticholinergic acent)

RN 312753-33-6 CA

CN 2(1H)-Quinolinone, 5-[2-[(5,6-diethyl-2,3-dihydro-1H-inden-2-yl)amino]-1hydroxyethyl]-8-hydroxy- (CA INDEX NAME)

REFERENCE COUNT: 7 THERE ARE RECORD. A

THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 67 OF 76 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 142:183470 CA

TITLE: Medicaments for inhalation comprising an anticholinergic and a betamimetic

INVENTOR(S): Meade, Christopher John Montague; Pairet, Michel;

Pieper, Michael P.

PATENT ASSIGNEE(S): Boehringer Ingelheim International G.m.b.H., Germany

SOURCE: U.S. Pat. Appl. Publ., 15 pp.
CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE
US 20050026948 AI 20050203 US 2004-891552 20040715 AU 2004262902 A1 20050217 AU 2004-262902 CA 2534132 A1 20050217 CA 2004-2534132 20040717 WO 2005014044 A1 20050217 WO 2004-EP8030 20040717 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, SN, TD, TG 20060503 20070321 EP 1651270 EP 2004-741130 A1 EP 1651270 1651270 B1 20070321 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK CN 1829534 A A 20060906 CN 2004-80022092
BR 2004013129 A 20061003 BR 2004-13129
JP 2007500151 T 20070415 AT 2004-741130
EP 1803469 A2 20070704 EP 2006-122278 20040717 20040717 20040717 20040717 20040717 R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LI, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR ES 2284025 T3 20071101 ES 2004-741130 20040717
MX 2006001047 A 20060424 MX 2006-1047 20060126
KR 2006052911 A 20060519 KR 2006-701861 20060126
PRIORITY APPLN. INFO:: EP 2003-17163 A 2003729
US 2003-507982P P 20031002
EP 2004-741130 A3 20040717

OTHER SOURCE(S): MARPAT 142:183470

AB Disclosed is a pharmaceutical composition comprising

3-[(hydroxydi-2-thienylacetyl)oxy]-1-(3-phenoxypropyl)-1azoniabicyclo[2,2,2]octane salts with a single neg, charge, and a

betamimetic, optionally together with a pharmaceutically acceptable excipient, for the treatment of respiratory tract diseases. For example, inhalable powders in a capsule contained

3-[(hydroxydi-2-thienylacetyl)oxy]-1-(3-phenoxypropyl)-1-

azoniabicyclo[2.2.2]octane bromide 150, formoterol fumarate dihydrate 50, and lactose 12,300 μg.

312753-33-6

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (medicaments for inhalation comprising anticholinergies and betamimetics)

RN 312753-33-6 CA

2(1H)-Quinolinone, 5-[2-[(5,6-diethyl-2,3-dihydro-1H-inden-2-yl)amino]-1hydroxyethyl]-8-hydroxy- (CA INDEX NAME)

L8 ANSWER 68 OF 76 CA COPYRIGHT 2009 ACS on STN 141:350042 CA

ACCESSION NUMBER:

TITLE: Preparation of quinoline-2-one derivatives for the

treatment of airways diseases INVENTOR(S): Fairhurst, Robin Alec; Sandham, David Andrew; Beattie,

David; Bruce, Ian; Cuenoud, Bernard; Madden, Reamonn; Press, Neil John; Taylor, Roger John; Turner,

Katharine Louise; Watson, Simon James PATENT ASSIGNEE(S): Novartis Ag, Switz.; Novartis Pharma GmbH

SOURCE: PCT Int. Appl., 87 pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

	TENT				KIN					APPLICATION NO.									
	2004														2	0040	402		
	W:										BG, EC,								
											JP,								
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,		
											SC,								
											UZ,								
	RW:										SZ,								
											BG,								
											MC,								
				BF,	BJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,		
	0001		TG									0000			_				
	2004									AU 2	004-	2268	24			0040	402		
	2521							0501		03.0		0501	071		_	0040	400		
	1613										004-								
	1613							0111		EF 2	.004-	1233	60			0040	402		
E.F									CD	CD	IT,	тт	TIT	NIT	C.E.	MC	DT		
	к.										TR,							HD	
BR	2004																	1110	
	1798																		
	2006																		
AT	4213	22			T		2009	0215		AT 2	004-	7253	60		2	0040	402		

ES 2320994	Т3	20090601	ES	2004-725360		20040402
MX 2005010712	A	20051215	MX	2005-10712		20051004
IN 2005CN02529	A	20070914	IN	2005-CN2529		20051004
US 20070066607	A1	20070322	US	2006-552023		20060727
PRIORITY APPLN. INFO.:			GB	2003-7856	A	20030404
			GB	2003-11462	A	20030519
			GB	2003-13489	A	20030611
			GB	2003-16656	A	20030716
			GB	2003-16657	A	20030716
			WO	2004-EP3516	W	20040402
OTHER SOURCE(S):	MARPAT	141:350042				

OTHER SOURCE(S): MARPAT 141:350042

- AB Title compds. represented by the formula I [wherein C-Y = CH2CH2, CH:CH, CH2CP, R1, R2 = H, OH and R1 × R2; G = (un)substituted cyclopentyl(alkyl), indanyl(alkyl), benzofuranyl(alkyl), etc.; in free or salt or solvate form] were prepared For example, reaction of (R)-1-aminoindane with (R)-8-benzyloxy-5-oxiranyl-1H-quinolin-2-one, followed by hydrogenation, gave II. I and their pharmaceutical compns. are useful for the treatment of a condition which is prevented or alleviated by activation of the β2-adrenoreceptor, or the treatment of a nobstructive or inflammatory airways disease (no data).
- IT 1055985-89-1 RL: PRPH (Prophetic)
 - (Preparation of quinoline-2-one derivatives for the treatment of airways diseases)
- RN 1055985-89-1 CA
- CN 2(1H)-Quinolinone, 5-[2-[(5,6-diethyl-2,3-dihydro-1,3-dimethyl-1H-inden-2-yl)amino]-1-hydroxyethyl]-8-hydroxy- (CA INDEX NAME)

REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 69 OF 76 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 141:350030 CA

TITLE: Preparation of (diphenyl) (pyrrolidinyl) methyl amides

as $\beta2$ adrenergic receptor agonist and muscarinic

receptor antagonist

INVENTOR(S): Mammen, Mathai; Hughes, Adam

PATENT ASSIGNEE(S): Theravance, Inc., USA SOURCE: PCT Int. Appl., 175 pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.		DATE	APPLICATION NO.				
WO 2004089892	A2	20041021	WO 2004-US9825	20040331			
WO 2004089892	A3	20041209					
W: AE, AG,	AL, AM, AI	, AU, AZ,	BA, BB, BG, BR, BW,	BY, BZ, CA, CH,			
CN, CO,	CR, CU, CZ	, DE, DK,	DM, DZ, EC, EE, EG,	ES, FI, GB, GD,			
GE, GH,	SM, HR, HU	J, ID, IL,	IN, IS, JP, KE, KG,	KP, KR, KZ, LC,			
LK, LR,	LS, LT, LU	J, LV, MA,	MD, MG, MK, MN, MW,	MX, MZ, NA, NI,			
			RO, RU, SC, SD, SE,				
TJ, TM,	IN, TR, TI	, TZ, UA,	UG, US, UZ, VC, VN,	YU, ZA, ZM, ZW			
			SD, SL, SZ, TZ, UG,				
			AT, BE, BG, CH, CY,				
			IT, LU, MC, NL, PL,				
			CM, GA, GN, GQ, GW,				
TD, TG	,,	,,,	,,,,	,,,			
EP 1615881	A2	20060118	EP 2004-758642	20040331			
R: AT, BE,	CH, DE, DK	ES, FR,	GB, GR, IT, LI, LU,	NL, SE, MC, PT,			
			CY, AL, TR, BG, CZ,				
JP 2006522134	T	20060928	JP 2006-509509	20040331			
US 20060287369	A1	20061221	US 2004-813745	20040331			
US 7317102	B2	20080108					
			US 2007-983963	20071113			
PRIORITY APPLN. INFO.	:		US 2003-459291P	P 20030401			
			US 2004-813745				
			WO 2004-US9825				

OTHER SOURCE(S): MARPAT 141:350030

GI

$$R^1_m$$
 Ar^1 E
 R^2_n Ar^2
 R^3_p
 R^4
 R^5_R
 R^5
 R^6
 R^6
 R^6
 R^6
 R^6
 R^6
 R^6

AB Title compds. represented by the formula I [wherein Ar1, Ar2 = independently Ph, (cyclo)alkyl, (un)substituted heteroaryl, heterocyclyl; m = 0-3; n = 0-3; R1-R3 = independently (cyclo)alkyl, alkenyl, alkynyl, cyano, etc.; E = CN, OH, carbonylamino, carboxylate; p = 0-4; R4 = a divalent; R5 = H or alkvl; R6 = carbamovl or alkoxvalkvl; R7 = H or R6R7 = (un) substituted (hetero) cyclyl; q = 1-2; and pharmaceutically acceptable salts, solvates or stereoisomers thereof] were prepared as \$2 adrenergic receptor agonist and muscarinic receptor antagonist. For example, II was given in a multi-step synthesis starting from the reaction of (S)-1-benzyl-3-pyrrolidinol with p-toluenesulfonyl chloride. II was tested for radioligand binding at human β 1, β 2 and β 3 adrenergic receptors with a ration of Ki(B1)/Ki(B2) greater than 8, and with Ki values of less than 50 nM at human muscarinic receptors, etc. Thus, I and their pharmaceutical compns. are useful as B2 adrenergic receptor agonist and muscarinic receptor antagonist for the treatment of pulmonary disorders, such as chronic obstructive pulmonary disease and asthma.

777064-28-5P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of (diphenyl)(pyrrolidinyl)methyl amides as β2 adrenergic receptor agonist and muscarinic receptor antagonist)

RN 777064-28-5 CA

3-Pyrrolidineacetamide, 1-[2-[[[(1R,3S)-3-[[2-(1,2-dihydro-8-hydroxy-2-oxo-CN 5-guinolinv1)-2-hvdroxyethv1|amino|cyclopentv1|carbonv1|amino|ethv1|α, α-diphenyl-, rel- (CA INDEX NAME)

Relative stereochemistry.

$$\begin{array}{c} O \\ H_2N \\ Ph \end{array} \begin{array}{c} Ph \\ Ph \end{array} \begin{array}{c} O \\ N \\ R \end{array} \begin{array}{c} O \\ N \\ O \\ O \end{array} \begin{array}{c} O \\ N \\ O \\ O \\ O \end{array}$$

5

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 70 OF 76 CA COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 141:332069 CA

TITLE:

REFERENCE COUNT:

Process for preparation of

5-(haloacetyl)-8-hydroxy-(1H)-quinolin-2-one

derivatives

INVENTOR(S): Lohse, Olivier; Penn, Gerhard; Schilling, Hanspeter PATENT ASSIGNEE(S): Novartis Ag, Switz.; Novartis Pharma GmbH

SOURCE: PCT Int. Appl., 42 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA:	TENT								APPLICATION NO.				D.	ATE				
WO	2004														2	0040	401	
	W:										BG,							
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	
											JP,							
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	ΜZ,	NΑ,	NI,	
											SC,							
											UZ,							
	RW:										SZ,							
											BG,							
											MC,							
				BF,	ΒJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	
			TG												_			
	2004									AU 2	004-	2262	12		2	0040	401	
	2004																	
	2520																	
EP	1613																	
	R:										IT,							
											TR,							HF
BR	2004	0091	54		A		2006	0328		BR 2	004-	9154			2	0040	401	
CN	1774 2006	423			A		2006	051/		CN 2	004-	8000	8956		2	0040	401	
JP	2006	5220	55		T		2006	0928		JP 2	006-	5049	53		2	0040	401	
	5426																	
	2339										005-							
	2005																	
ΤIΛ	2005	CNUZ	4/4		A		2007	0031		TIN 2	005-	UNZ4	/4			0050	930	

NO 2005005099	A	20060102	NO	2005-5099		20051101
US 20060189653	A1	20060824	US	2005-550621		20051103
IN 2008CN04678	A	20090313	IN	2008-CN4678		20080904
PRIORITY APPLN. INFO.:			US	2003-459724P	P	20030402
			WO	2004-EP3479	W	20040401
			TM	2005-CN2474	A 3	20050930

OTHER SOURCE(S): MARPAT 141:332069

This invention pertains to a method for producing 5-(α-haloacetyl)-8-hydroxy-(1H)-quinolin-2-one derivs. The process involves (i) reacting 8-hydroxy-(1H)-quinolin-2-one with an acylating agent and a Lewis acid to form 5-acetyl-8-hydroxy-(1H)-quinolin-2-one; (ii) reacting 5-acetyl-8-hydroxy-(1H)-quinolin-2-one with a compound RL [wherein R is a protecting group and L is a leaving group] in the presence of a base to form 5-acety1-8-(substituted oxy)-(1H)-quinolin-2-one; and (iii) reacting 5-acetyl-8-(substituted oxy)-(1H)-quinolin-2-one with a halogenating agent to form 5-(α-haloacety1)-8-(substituted oxy)-(1H)-quinolin-2-one. For example, 8-hydroxy-(1H)-quinolin-2-one was reacted with Ac20 in 1,2-dichlorobenzene in the presence of AlCl3 to give 5-acetyl-8-hydroxy-(1H)-quinolin-2-one (82.0%). The above compound was reacted with PhCH2Br in acetone in the presence of diisopropylethylamine to afford 5-acetyl-8-benzyloxy-(1H)-quinolin-2-one (91.7%). quinolinone obtained was treated with benzyltrimethylammonium dichloroiodate in AcOH to provide 5-(α-chloroacetyl)-8-benzyloxy-(1H)-quinolin-2-one.

IT 753498-25-8P

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

(preparation of 5-(haloacetyl)-8-hydroxy-(1H)-quinolin-2-one derivs.) 753498-25-8 CA

RN 753498-25-8 CA CN 2(1H)-Ouinoling

1

N 2(1H)-Quinolinone, 5-[(1R)-2-[(5,6-diethyl-2,3-dihydro-1H-inden-2-y1)amino]-1-hydroxyethyl]-8-hydroxy-, (22)-2-butenedioate (1:1) (CA INDEX NAME)

CM

CRN 312753-06-3 CMF C24 H28 N2 O3

Absolute stereochemistry.

CM 2

CRN 110-16-7 CMF C4 H4 O4

Double bond geometry as shown.



REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 71 OF 76 CA COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 141:260556 CA

TITLE: Process for preparing

5-[(R)-2-(5,6-diethylindan-2-ylamino)-1-hydroxyethyl]-8-hydroxy-(1H)-quinolin-2-one salt useful as an adrenocettor agonist

INVENTOR(S): Lohse, Olivier; Vogel, Caspar

PATENT ASSIGNEE(S): Novartis Ag, Switz.; Novartis Pharma GmbH SOURCE: PCT Int. Appl., 34 pp.

SOURCE: PCT Int. Appl., 34 pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

											LICAT						
											2004-						
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	ΜZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑT,	BE,
		BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,
		MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	. ВJ,	CF,	CG,	CI,	CM,	GA,	GN,
								TD,									
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CA	2517	033			A1		2004	0910		CA 2	2004-	2517	033		2	0040	227
										EP 2	2004-	7153	06		2	0040	227
	1599																
	R:										IT,						PT,
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BR	2004	0079	04		A		2006	0214		BR 2	2004-	7904			2	0040	227
CN	1753	874			A		2006	0329		CN 2	2004-	8000	5416		2	0040	227
CN	1003	6334	9		С		2008	0123			2004- 2006-						
JP	2006	5192	06		Т		2006	0824		JP 2	2006-	5019	72		2	0040	227
NZ	5417	27			A		2008	0731		NZ 2	2004- 2005-	5417	27		2	0040	227
RU	2332	405			C2		2008	0827		RU 2	2005-	1295	47		2	0040	227
ZA	2005	0060	60		A		2006	0726		ZA 2	2005-	6060			2	0050	728
										US 2	2005-	5469	41		2	0050	825
US	7534	890			B2		2009	0519									

IN 2005CN02065 20070831 IN 2005-CN2065 20050826 Α NO 2005004452 20051128 NO 2005-4452 20050926 A PRIORITY APPLN. INFO.: US 2003-450945P P 20030228 WO 2004-EP1981 A 20040227 OTHER SOURCE(S): CASREACT 141:260556; MARPAT 141:260556

ROUND Et NA-

A process for preparing 5-[(R)-2-(5,6-diethylindan-2-ylamino)-1-hydroxyethyl]-8-hydroxy-(1H)-quinolin-2-one (I) salt. The process involves forming an acid salt of 5-[(R)-2-(5,6-diethylindan-2-ylamino)-1-hydroxyethyl]-8substituted oxy-(1H)-quinolin-2-one (II; R = a protecting group; A- = an anion) and converting the acid salt to a salt of I, i.e. II (R = H), without isolating the free base of I. Thus, 30.89 g 2-amino-5.6-diethylindan was dissolved in diethylene glycol di-Me ether, treated with 36.4 g 8-phenylmethoxy-5-(R)-oxiranyl-1H-quinolin-2-one, stirred at 110° for 15 h, cooled to 70°, treated with 210 mL EtOH and then with a solution of a solution of 30.3 g benzoic acid in 140 mL ethanol, cooled to 45-50°, seeded, cooled to 0-5°, and filtered to give, after recrystn. from EtOH, 5-[(R)-2-(5,6-diethylindan-2-ylamino)-1-hydroxyethyl]-8-phenylmethoxy-(1H)quinolin-2-one benzoate (III). III (40 g) was hydrogenated over 5% Pd on charcoal (5.44 g) in 400 mL AcOH for 2-8 h, filtered over a pad of filter aid, concentrated at 50-60° under vacuum (100 mbar) to a volume of 70-90 mL, treated with 400 mL EtOH, heated to 50-60°, treated with a solution of 11.6 g maleic acid in 24 mL EtOH, seeded at 50° with a suspension of 350 mg micronized I in 20 mL isopropanol, and allowed to crystallize by slow cooling to 0-5°, and filtered, followed by washing with 50 EtOH and 25 mL isopropanol and recrystn. from 1.36 L EtOH, 24.3 g I maleate as a white crystalline powder. TТ 753498-41-8P

Ι

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(process for preparing 5-[(R)-2-(5,6-diethylindan-2-ylamino)-1hydroxyethyl]-8-hydroxy-(1H)-quinolin-2-one salt as adrenoceptor agonist)

RN 753498-41-8 CA

CN 2(1H)-Quinolinone, 5-[(1R)-2-[(5,6-diethyl-2,3-dihydro-1H-inden-2-yl)amino]-l-hydroxyethyl]-8-hydroxy-, benzoate (1:1) (CA INDEX NAME)

CM 1

CRN 312753-06-3 CMF C24 H28 N2 O3

Absolute stereochemistry.

CM 2

CRN 65-85-0 CMF C7 H6 O2

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 72 OF 76 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 141:225161 CA

TITLE: Preparation of biphenyl derivatives as

β2-adrenergic agonists and muscarinic antagonists

for pulmonary disorders.

INVENTOR(S): Mammen, Mathai; Dunham, Sarah; Hughes, Adam; Lee, Tae

Weon; Husfeld, Cralg; Stangeland, Eric

PATENT ASSIGNEE(S): Theravance, Inc., USA

SOURCE: U.S. Pat. Appl. Publ., 85 pp.

CODEN: USXXCO
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

	TENT NO.	KIND	DATE	APPLICATION NO.	DATE
US	20040167167	A1	20040826	US 2004-779157	20040213
US	7141671	B2	20061128		
AU	2004213411	A1	20040902	AU 2004-213411	20040213
CA	2515777	A1	20040902	CA 2004-2515777	20040213
WO	2004074276	A1	20040902	WO 2004-US4224	20040213

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        GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
        LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI
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A3 20041118
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        GQ, GW, ML, MR, NE, SN, TD, TG
                    A1 20041021
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US 20040209915
                                       US 2004-778290
US 20040209860
                     A1
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                                                               20040213
EP 1592685
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                                        EP 2004-711137
                     A1
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EP 1594860
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                                     EP 2004-711117
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                                       EP 2004-711253
                                                               20040213
                     A2
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BR 2004007508
                     Α
                           20060214
                                      BR 2004-7508
CN 1759108
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                                                               20040213
CN 100378092
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                          20080402
JP 2006517971
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JP 2006518739
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RU 2330841
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                                       RU 2005-128557
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                   A
                                        CN 2008-10074156
CN 101239968
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CN 101239969
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CN 101239971
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NZ 541579
                                        NZ 2004-541579
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               A 20070119
A 20060628
A 20051019
A1 20061005
B2 20080318
A1 20061005
IN 2005DN03375
                                        IN 2005-DN3375
                                                               20050728
                                                               20050803
ZA 2005006215
                                        ZA 2005-6215
NO 2005004206
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US 20060223858
                                       US 2006-448293
                                                               20060607
US 7345175
US 20060223859
                                      US 2006-448294
                                                               20060607
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US	7355046	B2	20080408				
US	20060223860	A1	20061005	US	2006-448317		20060607
US	20060229334	A1	20061012	US	2006-449004		20060607
US	7521561	B2	20090421				
US	20070037984	A1	20070215	US	2006-582885		20061018
US	7524959	B2	20090428				
US	20070088054	A1	20070419	US	2006-604607		20061127
US	7514558	B2	20090407				
JP	2007119496	A	20070517	JP	2007-31325		20070209
US	20070208176	A1	20070906	US	2007-788343		20070419
US	20070276003	A1	20071129	US	2007-879004		20070713
US	20080015220	A1	20080117	US	2007-888526		20070801
US	7507751	B2	20090324				
IN	2008DN05591	A	20080926	IN	2008-DN5591		20080627
IN	2008DN09343	A	20090619	IN	2008-DN9343		20081107
PRIORITY	APPLN. INFO.:			US	2003-447843P	P	20030214
				US	2003-467035P	P	20030501
				CN	2004-80006528	A3	20040213
				JP	2006-503604	A3	20040213
					2004-779157	A1	20040213
				WO	2004-US4224	W	20040213
				WO	2004-US4273	W	20040213
					2004-US4449	W	20040213
					2005-DN3375		20050728
					2006-448293	A3	
					2006-448294	A1	20060607
OTHER SO	OURCE(S):	CASREA	CT 141:2251	61; 1	MARPAT 141:225161		

OT: GI

AR Title compds. I [R1 (taken 0-3 times) = alk(en/vn)vl, cvcloalkvl, etc.; R2 (taken 0-3 times) = alk(en/yn)yl, cycloalkyl, CN, etc.; W = O, substituted N; R3 (taken 0-4 times) = alk(en/yn)yl, cycloalkyl, etc.; R4 = divalent group; R5 = H, alkyl; R6 = amino, alkoxy, etc.; R7 = H, etc.] are prepared For instance, N-[1,1'-Biphenyl-2-yl]-N'-[1-(9-aminononyl)piperidin-4vllurea (preparation given) is combined with 8-Benzyloxy-5-(2,2-dihydroxyacetyl)-1H-quinolin-2-one (CH2Cl2, NaHB(OAc)3)

and the product reduced (MeOH, H2-Pd/C) to give II. Selected example compds. have Ki < 10 nM for the $\beta2$ and muscarinic receptor. I are useful in the treatment of pulmonary disorders, such as chronic obstructive pulmonary disease and asthma.

743461-80-5P, Biphenyl-2-ylcarbamic acid

1-[2-[[[(1R,3S)-3-[[(R)-2-hydroxy-2-(8-hydroxy-2-oxo-1,2-dihydroquinolin-5yl)ethyl]amino]cyclopentane-1-yl]carbonyl]amino]ethyl]piperidin-4-yl ester RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of biphenyl derivs, as β2-adrenergic agonists and muscarinic antagonists for pulmonary disorders)

RN 743461-80-5 CA CN

Carbamic acid, [1,1'-biphenyl]-2-yl-,

1-[2-[[[(1R,3S)-3-[[(2R)-2-(1,2-dihydro-8-hydroxy-2-oxo-5-quinolinv1)-2hydroxyethyl]amino]cyclopentyl]carbonyl]amino]ethyl]-4-piperidinvl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

41 ANSWER 73 OF 76 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 141:59702 CA

TITLE: Inhalant containing a combination of a tiotropium salt

and a β -mimetics for the treatment of COPD INVENTOR(S): Konetzki, Ingo; Meade, Christopher J. Montague;

Pairet, Michel; Pieper, Michael P. PATENT ASSIGNEE(S): Boehringer Ingelheim Pharma GmbH & Co. KG, Germany

SOURCE: Ger. Offen., 22 pp. CODEN: GWXXBX

DOCUMENT TYPE: Patient. LANGUAGE: German FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.			APPLICATION NO.				
DE 10256080	A1	20040617	DE 2002-10256080 CA 2003-2507656	20021129			
WO 2004050093	A1	20040617	WO 2003-EP12913	20031119			
CN, CO	CR, CU, CZ	, DE, DK, D	BA, BB, BG, BR, BW, DM, DZ, EC, EE, EG, EN, IS, JP, KE, KG,	ES, FI, GB, GD,			
			ID, MG, MK, MN, MW,				
			RU, SC, SD, SE, SG,				
			IS, UZ, VC, VN, YU,				
RW: BW, GH	GM, KE, LS	, MW, MZ, S	D, SL, SZ, TZ, UG,	ZM, ZW, AM, AZ,			
BY, KG	KZ, MD, RU	, TJ, TM, A	T, BE, BG, CH, CY,	CZ, DE, DK, EE,			
			T, LU, MC, NL, PT,				
TR, BF	BJ, CF, CG	, CI, CM, G	GA, GN, GQ, GW, ML,	MR, NE, SN, TD, TG			
			AU 2003-288107				
			US 2003-717868	20031119			
US 7250426	B2	20070731					
			EP 2003-779979	20031119			
EP 1581224							
			GB, GR, IT, LI, LU,				
			CY, AL, TR, BG, CZ,				
JP 2006309776	1	20000323	JP 2004-556154 AT 2003-779979	20031119			
A1 384531	π.,	20080215	ES 2003-779979	20031119			
PRIORITY APPLN. INFO		20080316	DE 2002-10256080				
FRIORITI AFFEN. INFO	···		US 2003-446668P				
			WO 2003-EP12913				
OTHER SOURCE(S):	MARPAT	141:59702	2000 11 12713	20031117			

$$\begin{array}{c|c} \text{OH} & R1 \\ \text{HO} & R^2 \\ \text{O} & R^4 \end{array}$$

AB The invention concerns a combination for the treatment of chronic obstructive pulmonary disease composed of a tiotropium salt, preferably tiotropium bromide, and a β -mimetic of the general formula (1), where R1, R2 = H, Cl-4-alkyl; R3, R4 = H, Cl-4-alkyl, O-Cl-4-alkyl, Cl-4-alkylene-Cl-4-alkyl; or R3, R4 together are for a bridging group O-Cl-4-alkylene or -O-Cl-4-O-, or its salt. Inhalant powders, suspensions and solns. are prepared Thus an inhalant powder contained (µg/capsule): tiotropium bromide monohydrate 10.3; $5 - [[(5,6-\mathrm{diethyl-2},3-\mathrm{dihydro-lH-inden-2-yl)amino]-1-hydroxyethyl]-8-hydroxy-2(lH)-quinoline monohydrothoride 35; and lactose 4954.2.$

Ι

CN

IT 614751-12-1

RL: PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(inhalant containing combination of tiotropium salt and $\beta\text{--mimetics}$ for treatment of COPD)

RN 614751-12-1 CA

2(1H)-Quinolinone, 5-[2-[(5,6-diethyl-2,3-dihydro-1H-inden-2-yl)amino]-1-hydroxyethyl]-8-hydroxy-, (2Z)-2-butenedioate (1:1) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 312753-33-6 CMF C24 H28 N2 O3

CM 2

CRN 110-16-7 CMF C4 H4 O4

Double bond geometry as shown.

L8 ANSWER 74 OF 76 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 139:341650 CA

TITLE: Medicaments containing betamimetic drugs and a novel anticholinesterase drug for treating respiratory tract

diseases

INVENTOR(S): Banholzer, Rolf; Meade, Christopher John Montague;
Meissner, Helmut; Morschhaeuser, Gerd; Pairet, Michel;

Pieper, Michael P.; Pohl, Gerald; Reichl, Richard; Speck, Georg; Konetzki, Ingo

PATENT ASSIGNEE(S): Boehringer Ingelheim Pharma G.m.b.H. & Co. K.-G., Germany

SOURCE: PCT Int. Appl., 45 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: German FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.					KIND DATE			APPLICATION NO.						DATE			
						WO 2003-EP3669											
																, CH,	
																, GE,	
																, LK,	
																, NZ,	
																, TR,	
							VC.										
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		FI,	FR,	GB,	GR,	HU,	IE,	IT,	LU,	MO	, NL	PT,	RO,	SE,	SI	, SK,	TR,
		BF,	BJ,	CF,	CG,	CI,	CM,	GA,	GN,	GÇ	, GW	, ML,	MR,	NE,	SN	, TD,	TG
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US	7417	051			B2		2008	0826									
CA	2481	468			A1		2003	1023		CA	2003	-2481	468			20030	409
AU	2003	2322	01		A1		2003	1027		AU	2003	-2322	01			20030	409
AU	2003	2322	01		B2		2009	0611								20030	
EP	1497	289			A1		2005	0119		ΕP	2003	-7461	58			20030	409
EP	1497	289			B1		2005	0824									
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CN	1646	527			A		2005	0727		CN	2003	-8083	30			20030	409
AT	3027	74			T		2005	0915		ΑT	2003	-7461	58			20030	409
JP	2005	5291	11		T		2005	0929		JΡ	2003	-5840	53			20030 20030 20030 20030 20030 20030	409
EP	1586	574			A1		2005	1019		ΕP	2005	-1070	8			20030	409
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		ΙE,	SI,	LT,	LV,	FΙ,	RO,	MK,	CY,	AI	J, TR	, BG,	CZ,	EE,	HU	, SK	
ES	2248	767			Т3		2006	0316		ES	2003	-7461	58			20030	409
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nunn e	ounc=				143.50		139:	2410	- 0	WO	2003	-EP36	69		W	20030	409
THER S	OURCE	(5):			MAR	AT	139:	3416	υC								

GI

^{*} STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The invention relates to novel medicament compns. based on long-acting $\beta 2$ agonists and salts I·X- [X = simple anion (Cl, Br, I, sulfate, phosphate, O3SMe, NO3, maleate, OAc, citrate, fumarate, tartrate, oxalate, succinate, O2CPh, OTs)], of a novel anticholinesterase drug I, to

methods for the production of these compns. and their use in treating respiratory tract diseases. The invention also relates to the combination of I with one or more biomimetics II [RI, R2 = H, C1-4-alky1, R3, R4 = H, C1-4-alky1, C1-4-alky1, C1-4-alky1, C1-4-alky1, C1-4-alky1, C1-4-alky1, C1-4-alky1, C1-4-alky1, C1-4-alky1, their enantiomers, mixts., racemates, solvates, hydrates or with salmeterol, formoterol or their acid addition salts. Thus, an example inhalation powder formulation comprises I Br- and II HO2CCH: CHOC0H-(C1) (R1 = R2 = H, R3 = R4 = Rt)

and lactose. IT 614751-12-1P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(betamimetic drug; medicaments containing betamimetic drugs and a novel anticholinesterase drug for treating respiratory tract diseases)

RN 614751-12-1 CA

2(1H)-Quinolinone, 5-[2-[(5,6-diethyl-2,3-dihydro-1H-inden-2-yl)amino]-1-hydroxyethyl]-8-hydroxy-, (2Z)-2-butenedioate (1:1) (salt) (9CI) (CA INDEX NAME)

CM 1

CN

CRN 312753-33-6 CMF C24 H28 N2 O3

CM 2

CRN 110-16-7 CMF C4 H4 O4

Double bond geometry as shown.

REFERENCE COUNT:

3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD, ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 75 OF 76 CA COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 137:37642 CA
TITLE: Preparation and formulation

Preparation and formulation of a quinolinone compound for treatment of airway disorders

INVENTOR(S): Cuenoud, Bernard; Fairhurst, Robin Alec; Lowther,

Nicholas

PATENT ASSIGNEE(S): Novartis A.-G., Switz.; Novartis-Erfindungen

Verwaltungsgesellschaft mbH; Novartis Pharma GmbH

SOURCE: PCT Int. Appl., 25 pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English

LANGUAGE: Er FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

PATENT NO.				KIND DATE			APPLICATION NO.						DATE					
WO 2002045703			A2 20020613			WO 2001-EP14122						20011203						
WO	2002	0457	03		A3		2003	0313										
	W:	AE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BE	3,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
		co,	CR.	CU,	CZ.	DE.	DK.	DM,	DZ.	E	٠.	EE.	ES.	FI.	GB,	GD,	GE,	GH,
		HR.	HU.	ID.	IL.	IN.	IS,	JP.	KE.	KO	э.	KP.	KR.	KZ.	LC.	LK.	LT.	LU.
							MX,											
							TT,											,
	RW:						DK,											NL.
		PT.	SE.	TR														
CA	2427 2002 1341 1341	282			A1		2002	0613		CA	20	01-2	2427	282		2	0011	203
AU	2002	0170	82		A		2002	0618		ΑU	20	02-3	1708	2		2	0011	203
EP	1341	542			A2		2003	0910		EΡ	20	01-9	9993	66		2	0011	203
EP	1341	542			B1		2007	0502										
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		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	ΑI	L,	TR						
HU	2003	0025	71		A2		2003	1128		HU	20	03-2	2571			2	0011	203
HU	2003	0025	71		A3		2005	0530										
BR	2001	0159	10		A		2004	0120		BR	20	01-3	1591	0		2	0011	203
JP	2004	5147	39		T		2004	0520		JP	20	02-	5474	87		2	0011	203
NZ	5257	31			A		2004	1126		NZ	20	01-	5257	31		2	0011	203
AU	2002	2170	82		B2		2005	0407		AU	20	02-2	2170	82		2	0011	203
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RU	2292	890			C2		2007	0210		RU	20	03-	1195	49		2	0011	203
EP	1772	142			A2		2007	0411		EP	20	07-3	1000	48		2	0011	203
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		NL,	PT,	SE,	TR,	RO,	SI											
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ES	3610 2284 1557 2003 2003 2003 3256 2003	732			Т3		2007	1116		ES	20	01-9	9993	66		2	0011	203
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IN	2003	CN00	856		A		2005	0422		IN	20	03-0	CN85	6		2	0030	602
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HK	1059	564			A1		2008	0111		HK	20	04-3	1009	18		2	0040	211
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		-								EP	20	01-9	9993	66		A3 2	0011	203
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OTHER SOURCE(S):

MARPAT 137:37642

 ${\tt AB} \quad {\tt An} \ {\tt inhalation} \ {\tt composition} \ {\tt comprises}, \ {\tt sep.} \ {\tt or} \ {\tt together}, \ ({\tt A}) \ {\tt a} \ {\tt quinolinone} \ {\tt compound}$

I

- (T) in free or pharmaceutically acceptable salt or solvate form and (B) a corticosteroid, useful for simultaneous, sequential or sep. administration in the treatment of an inflammatory or obstructive airway disease. The molar ratio of (A) to (B) is from 100:1 to 1:300. A composition is an aerosol or a dry powder in a capsule. For example, an aerosol formulation was prepared by dispensing 10 parts of micronized I maleate, 10 parts of mometasone furoate, and 100 parts of lactose (bulking agent) into a vial, sealing the vial with a metering valve, injecting the premix of 2500 parts of ethanol, 30,500 parts of propellant HFA134a, 67,000 parts of propellant HFA227, and 0.5 parts of olded acid (surfactant) into the vial through the valve, and subjecting the vial to ultrasonic energy to disperse the solid particles.
- T 312753-06-3P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

- (preparation and quinolinone compound and its formulation with $\operatorname{corticosteroid}$
- for treatment of airway disorders)
- RN 312753-06-3 CA
- CN 2(1H)-Quinolinone, 5-[(1R)-2-[(5,6-diethyl-2,3-dihydro-1H-inden-2yl)amino]-1-hydroxyethyl]-8-hydroxy- (CA INDEX NAME)

Absolute stereochemistry.

3 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS

L8 ANSWER 76 OF 76 CA COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 134:42074 CA

TITLE: Preparation of indanyl-substituted quinolinone

derivatives as $\beta 2$ -adrenoceptor agonists Cuenoud, Bernard; Bruce, Ian; Fairhurst, Robin Alec; INVENTOR(S):

Beattie, David

PATENT ASSIGNEE(S): Novartis A.-G., Switz.; Novartis-Erfindungen

Verwaltungsgesellschaft m.b.H. SOURCE:

PCT Int. Appl., 61 pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

REFERENCE COUNT:

PAT	TENT	NO.			KIN	D	DATE			APPL	ICAT	ION :	мо.		D.	ATE	
WO	2000	0751	14		A1		2000	1214		WO 2	000-	EP50	 58		2	0000	602
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											GB,						
											KZ,						
											NO,						
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		ZA,															
	RW:										TZ,						
											LU,				SE,	BF,	ВJ,
											NE,						
	2534																
	2375																
	2000																
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							RO										
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RU	2244709	C2	20050120	RU	2001-135801		20000602
IL	146578	A	20070515	IL	2000-146578		20000602
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NO	2001005912	A	20020121	NO	2001-5912		20011203
NO	322944	B1	20061218				
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PRIORITY	APPLN. INFO.:			GB	1999-13083	A	19990604
				WO	2000-EP5058	W	20000602
				US	2002-9008	A3	20020108

OTHER SOURCE(S): MARPAT 134:42074 GI

- AB The title compds. I [Ar = Q; R1 = H, OH, alkoxy; R2, R3 = H, alkyl; R4-R7 = H, halo, cyano, aryl, etc.; R8 = halo, R013, etc.; R9 = H or part of a heterocycle; R10 = OR19, NHR19, etc.; X = halo, halomethyl, alkyl; Y = C, N; n = 1, 2; p = 0, 1; q, m = 0, 1], B2-adrenoceptor agonists, were prepared E.g., 5-[2-(5,6-dimethoxyindan-2-ylamino)-1-hydroxyethyl]-8-hydroxy-HH-quinolin-2-one was prepared
- IT 312753-06-3P
 - RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of indanyl-substituted quinolinone derivs, and related compds, as $\beta 2$ -adrenoceptor agonists)

- RN 312753-06-3 CA
- CN 2(1H)-Quinolinone, 5-[(1R)-2-[(5,6-diethyl-2,3-dihydro-1H-inden-2-yl)amino]-1-hydroxyethyl]-8-hydroxy- (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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Executing the logoff script...

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